

"AN URGENT CALL FOR YOU"

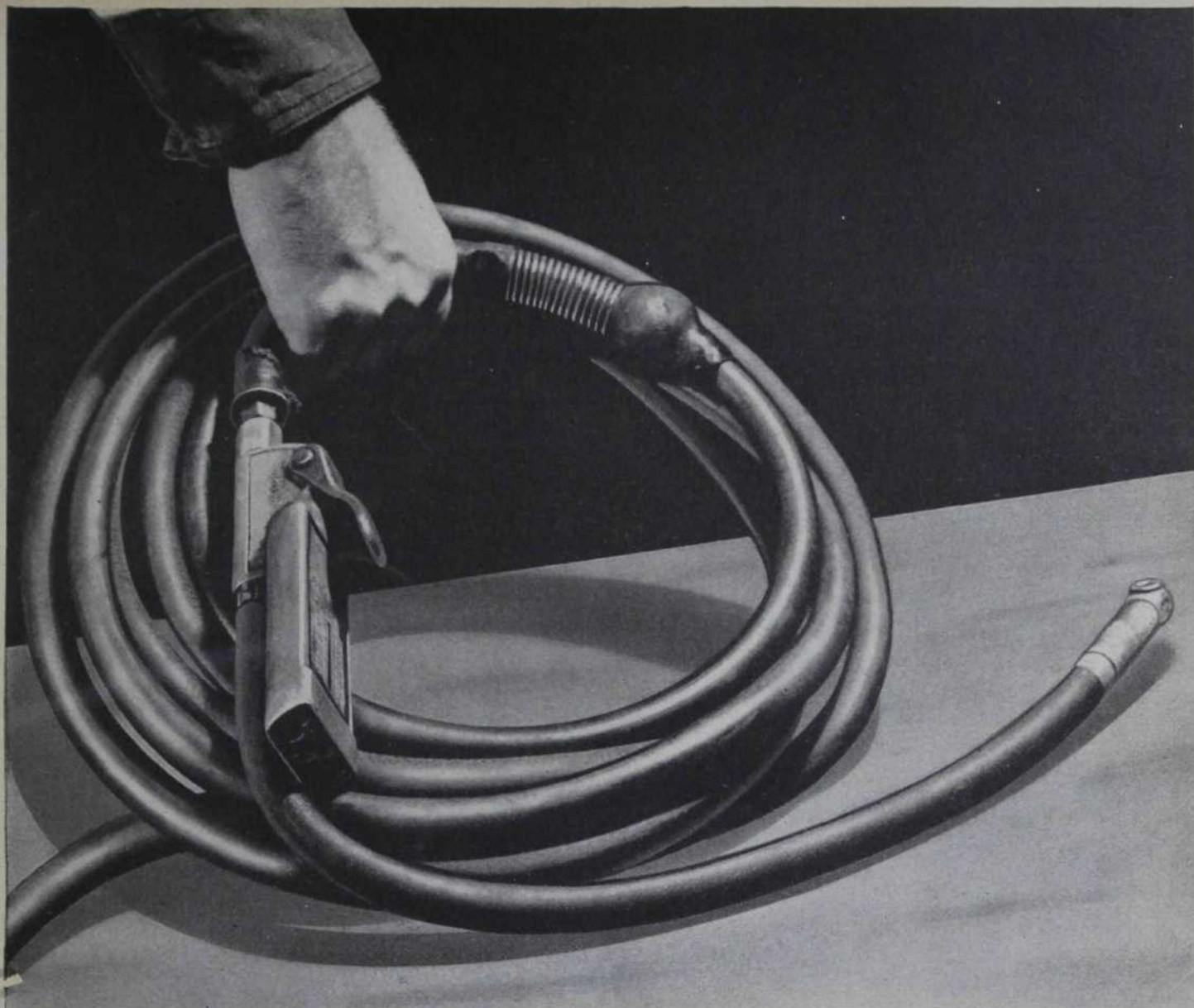
*"Please do not make Long Distance
telephone calls to war-busy centers
unless it is really necessary."*

That helps keep the lines open for war
messages and war's on the wires these days.
When we can get telephone materials again
we'll give you all the wires you desire.
Many thanks.



BELL TELEPHONE SYSTEM





He Found \$1000 in an Air Hose

A typical example of B. F. Goodrich leadership in truck tires

TRUCK tires were wearing out and blowing out long before their time. Hours and days were lost due to road delays. Tire repairs were costly. Precious rubber was being wasted. Truck owners did their best to correct this situation, but still found tire life too short.

B. F. Goodrich recognized this problem. Drawing on the experience of many years in handling completely the tire maintenance for large bus fleets, the company announced the B. F. Goodrich Tire Conservation Service for fleet operators. This is a comprehensive, point-by-point program under which factory-trained engineers take over the complete supervision of tire care.

Some of the country's largest fleet owners signed up for this low-cost plan immediately. B. F. Goodrich engineers found ways to cut costs over-

night. Improper inflation was a source of trouble in many fleets. In one case where this condition was particularly bad, our engineer set up proper schedules, quickly corrected the errors, and reported, "We found \$1000 in the air hose."

And here's what the operators said: "We believe we will show a 25% saving." "It saves far more than it costs." "The number of failures has been reduced over 60%." "We have had only one failure in 149,863 miles."

With results like that it's no wonder that thousands of trucks are now being handled under this plan. For this is not just another tire conservation program, good as they are. This program, based on putting tire maintenance in

the hands of *trained tire engineers*, is the first of its kind to be offered by any rubber company—another example of the leadership which has made B. F. Goodrich "First in Rubber". If you would like details of this scientific tire conservation plan, write

Tire Conservation Dept., The B. F. Goodrich Company, Akron, Ohio.



In war or peace
B.F. Goodrich
FIRST IN RUBBER





"Proceeding with Assigned Task"

OUR assigned task is now to give the armed forces what they need to win this war.

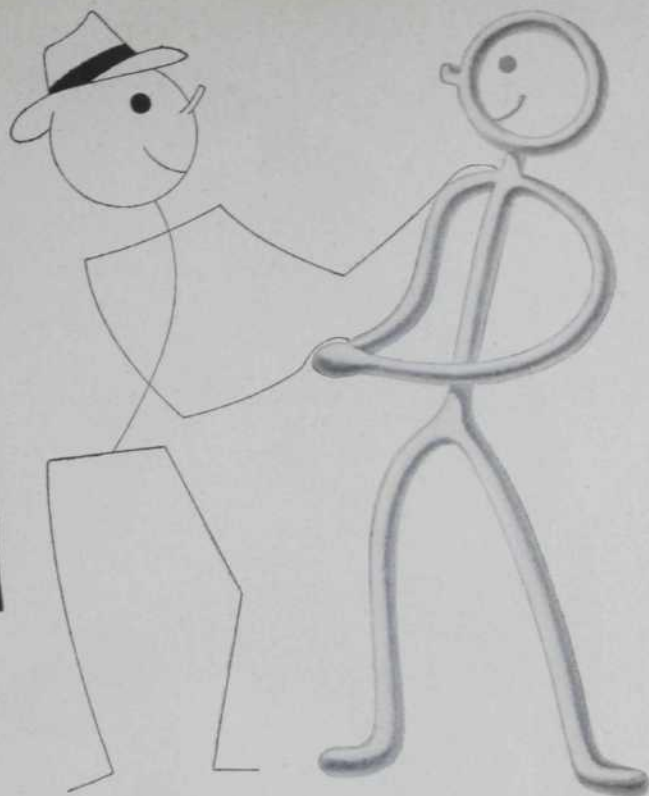
Fairbanks-Morse Diesel Engines have become an important weapon in global warfare. Submarines of the United States Navy are each day exacting heavy toll from the enemy in his own waters.

The years of pioneering, the years of research which made this company a leader in Diesel design and manufacture are now yielding rich returns to the nation in its time of need.



FAIRBANKS, MORSE & CO.

WE HAVE THIS TO SAY ABOUT PLASTICS



Nothing that an aluminum man can have to say about plastics can add to their virtues or subtract from their very genuine possibilities.

Actually, Alcoa welcomes the strides being made, technically and commercially, by this great and ingenious industry.

This is not mumbo-jumbo. It is a distinctly pious thought.

The more folks who get the big idea that the bright hope of industry, postwar, is to do new things new ways . . . the more designers who really get down to cases, the better for all of us. Imagineering is a nationwide must.

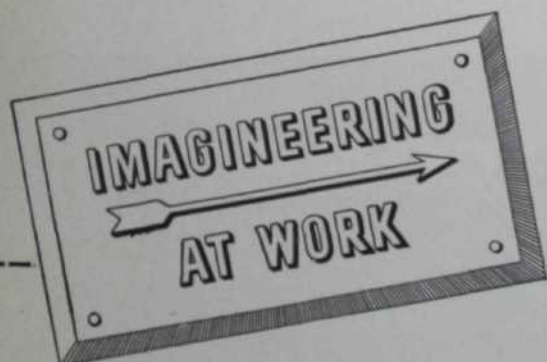
Plastics do many things better than any other material.

Alcoa Aluminum does many things better than any other material.

The two can team up to do a better job for you in certain situations than either could do alone.

As for Alcoa Aluminum, busy seven days a week on war production, we can only remind you that when our strong alloys are again available, you are going to have to throw your old measuring sticks into the scrap heap. New costs, new strengths, new technology, new finishes.

Of such things will postwar jobs be made. On such things must our "eighth-day" thinking be concentrated. ALUMINUM COMPANY OF AMERICA, 2125 Gulf Building, Pittsburgh, Pennsylvania.



Alcoa Aluminum





MORE production
per **MAN HOUR**
is the only answer

GEORGE S. MAY COMPANY

CHICAGO
May Building
2600 North Shore Ave.

Business Engineering

CANADA: 320 Bay St., Toronto

NEW YORK
Chanin Building
122 East 42nd Street

OFFICES IN PRINCIPAL CITIES

Contents for January 1943



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BUSINESS

**Chamber of Commerce of
the United States**

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NUMBER 1

GENERAL OFFICE—Washington, U. S. Chamber Building.

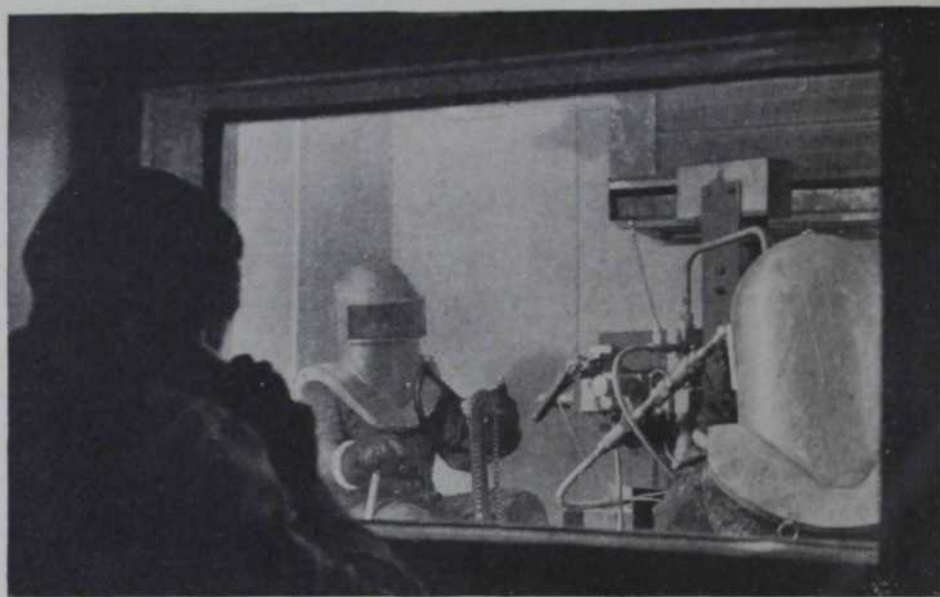
BRANCH OFFICES—New York, 420 Lexington Ave.; San Francisco, 333 Pine Street; Dallas, 1101 Commerce St.; Chicago, First National Bank Building; Atlanta, Chamber of Commerce Building; Canadian representative, 530 Board of Trade Building, Montreal, Quebec.

As the official magazine of the Chamber of Commerce of the United States this publication carries authoritative notices and articles in regard to the activities of the Chamber; in all other respects the Chamber cannot be responsible for the contents thereof or for the opinions of writers.

Although the editors will make every effort to return unsolicited manuscripts promptly and in good condition, Nation's Business cannot accept responsibility for loss or damage of this material.

GLASS HELPS BRING THE STRATOSPHERE

Down to Earth!



Six . . . seven . . . eight miles up. Up in the stratosphere. Soon our flyers and planes will be streaking through heights fit only for angels, before.

Because these heights do strange things to men and machines, industry is untiringly testing the performance of special motors, instruments and parts under actual stratospheric conditions. It is also seeking facts that will help medical science protect the men who rise to these rarefied heights where concentrated oxygen must be breathed and —100° cold combated.

Large testing chambers, like the one in the Douglas Aircraft Company plant, pictured above, bring the extreme temperature and atmospheric conditions of the stratosphere down to earth. These chambers are built with large glass windows so that work inside can be observed.

Because of the bitter cold inside, this would have been one of the most difficult windows in the world to glaze if it had not been for a remarkable Libbey-Owens-Ford glass development . . . Thermopane.

Thermopane might be likened to an air-conditioned

glass sandwich. It is made of multiple panes of glass bonded together in one unit. The air space between each pane of glass is dehydrated and sealed. This unusual insulating window eliminates condensation between panes, even under conditions of extreme cold. No dirt nor dust can get inside the glass to impair vision. In short, Thermopane, for the first time, provides a glass window that insulates and affords the clearest vision at the same time.

Today, Thermopane is making an important contribution to the war effort. Tomorrow, this new glass unit, perfected by Libbey-Owens-Ford, promises to open the way to revolutionary benefits in the fields of clear-vision insulation and window conditioning for postwar construction.

Libbey-Owens-Ford glass research is multiplying the usefulness of flat glass, both for military and civilian needs. One of the many types of L·O·F flat, bent or tempered glass products may be the answer to your product problem. May we help you? Libbey-Owens-Ford Glass Company, 1342-A Nicholas Building, Toledo, Ohio.



LIBBEY·OWENS·FORD

QUALITY *Flat Glass* PRODUCTS

Through the Editor's 'Specs'

Current comment on Washington: A coordinating committee is a body which brings chaos out of regimented confusion.

Notes on our Third Army

IT WAS remarked in this column last month that, in trying to keep tires from wearing out, the regulations might wear out our patience before the tires. Before the ink was dry a new tire order was released. To get a new tire or recap, your old tire must be inspected. The inspection report, with its recommendation for one of four kinds of tires, must be taken to the tire retailer. Now, the new order provides that the dealer keep the old tire and the inspection report for 30 days until another inspector can get around to inspect the work of the first inspector. Two strikes on the first inspector, and he's out.

RATIONING APPLICATION forms and questionnaires came in for Senatorial scrutiny during the month. We dropped in on the Byrd committee in the course of the hearings. The testimony showed that our new federal war agencies are the prime offenders. They have a passion for plain, fancy and assorted, even nondescript bits of information. "How often will you wear these boots?" asks the O.P.A. "Give the percentage of cubic space used by this truck during the first quarter of 1941," asks O.D.T. Forty-two pages of forms and memoranda for a Mid-west manufacturer to fill out as a penalty of receiving a government order for 90 felt washers (net amount of cash involved, \$5). A national milk distributor fills out a government report each 14 minutes of the working day.

Our great and powerful federal Government, it seems, is out to discover every delicate shade of human motives—and by means of a questionnaire.

THIS QUESTIONNAIRE RACKET, for it has become a racket, was started by Diogenes. But we have respect for Diogenes. He was a man. He met his victim face to face, he did not hide behind the mail carrier. Furthermore, he didn't start out on the assumption that there were no honest men. Nor

was he suspicious of his own amanuensis.

Socrates further developed the questionnaire idea. But, again, he was different from our Washington quiz-kids in that he assimilated his information. He did not stow it away in garages. However, he carried his questioning too far and this should be a tip to our contemporaneous inquisitors. Particularly the O.C.D. matrons who are ringing door bells block by block should find out from Professor Landis just what happened to Socrates. And then ask W.P.B. if there is a priority on hemlock.

WE CAME away from the hearings greatly disturbed. Seldom do we view with alarm, but bold action seems necessary, if our Third Army, as Senator Byrd characterizes our Regimenters, is to play its part in winning the war. We saw it faced by business men, long suffering, with their backs to the wall and a gleam of desperation in their collective eye. We pictured 27,000,000 fellow citizens, who with us on bleak November days lay on their stomachs under their automobiles trying to decipher the sesquipedalian numbers on their abraded tires.

We divulged our apprehension to a friend of ours, a very practical sort of fellow. He suggested this remedy. Let each citizen who receives a questionnaire send in return a questionnaire. It would be like a government questionnaire, starting out something like this: "In order to assist me in filling out your questionnaire, please fill in the attached form." He proposes to ask not more than 40-odd questions. The first would be:

What are your qualifications (a) as to asking questions? (b) as to analyzing answers?

Do you expect to carry on this job after the duration and make it your life work, and why? (Use separate sheet for reply.)

The 40th question, our friend thinks, will kill 90 per cent of the insatiate urge for information. It is:

Will you post bond that the information you get will be put to use?

PERHAPS OUR concern about the questionnaire rabies is exaggerated. Maybe no such bold measures are neces-

sary. We once saw a sign in a railroad office which read, "Information Given Out." In this day of shortages we are faced with this critical shortage—all information gone. There ain't any more. You've got all there is. Consult your own files.

Home may be like that

JUST when the Office of Economic Stabilization is ordering a general curtailment of special services and conveniences of retailers, which O.E.S. terms "frills and wastes," along comes Dr. Charles A. Thomas, research director of the Monsanto Chemical Company, with a forecast of a bright new world after the war. Among other things, he says:

In metropolitan areas it is highly possible there will be no kitchens in the home; food will be sent to the house, via a pneumatic delivery tube, cooked and ready to serve. The modern housewife (this word, too, may become obsolete) will talk not to a grocer but to a local community kitchen by radio television and may inquire, in an irritated voice, why her order of hot lamb chops, peas and vitamin biscuits has not reached her. When her dinner does arrive, the food will be perfectly prepared, precisely the right temperature and skillfully seasoned with the most appetizing condiments.

That cheers us up. But an appalling thought strikes us. Imagine Mother standing in the doorway and announcing ominously, not "Cook's quit!" but "Dinner's stuck in the tube!"

Improved definitions, illustrated

THE O.P.A. is a big organization doing a big job, and it just can't avoid producing a certain amount of whimsicality. Its press releases make fascinating reading—if your eyes can stand the fine type. OPA-T-325 is an eight-pager devoted to improving the reader's understanding of O.P.A.'s definitions of wastepaper. "Improved definitions," the release calls them. There are five solid pages of the "improved definitions." The last three pages are as blank as your mind after reading the first five. Probably an exhibit of the wastepaper they were defining.

Elections and housing

WASHINGTON'S housing shortage continues acute. New congressmen,

It could have happened here



Thanks to Cities Service Research

Enemy planes coming over . . . and thirty minutes to wait while your plane warms up! Thirty minutes! And your plane pinned to the deck like a giant eagle . . . helpless before the vultures closing in . . .

* * *

There was a time — and it was not so long ago — when this could have happened. For it actually took thirty minutes of warming up before a carrier plane could take off . . . thirty minutes of time lost and ten gallons of gasoline wasted.

Then, out of ceaseless research, came the Cities Service Immersion Heater—

a compact instrument that keeps oil at uniform temperature.

Today, equipped with these Heaters, our planes can take off almost instantly. And they are taking off — carrying the fight to the enemy on all the far-flung battlegrounds of the world!

Chalk up another smash hit for Cities Service! The same research that developed Cisco Solvent and Trojan Lubricants has scored again—this time for Uncle Sam.

In war, as in peace, the ideal of Cities Service remains the same. *Service to the Nation!*

OIL IS AMMUNITION—USE IT WISELY!



**CITIES SERVICE
OIL COMPANIES**

NEW YORK — CHICAGO — SHREVEPORT

elected in November, are advertising for houses in the Capital's want ad sections. Most of them conclude with "Will sign two-year lease." We haven't heard of a single one, so far, who was willing to commit himself for longer than one term of office—for which we don't blame them in these parlous times. The house-hunters have given defeated congressmen no peace; their telephones ring constantly. One reckless fellow, confident that he had his district "sewed up" for at least one more term, bought a house in Washington last summer. On November 4 he put it on the market, sadly.

Converting woman-power

THERE'S a wealth of human interest material in the experiences of American housewives who are working in our huge aircraft and other war industries. Here, for instance, is an excerpt from a letter written recently by a former hat department clerk who has gone to work in the stockroom of one of the West Coast aviation plants:

After a few days, I was filling an order for some bolts. The man wanted 150 of the three-eighths size. After I had gone to the bins—a distance of at least half a block—I discovered we had some $\frac{3}{8} \times 1$ and some $\frac{3}{8} \times 1\frac{1}{2}$. I communed with myself and decided on the $\frac{3}{8} \times 1$ size. When I counted out 150 of the beastly things and trundled them back on a little cart, the man said he was sorry but he needed the $\frac{3}{8} \times 1\frac{1}{2}$ size.

I launched into the sort of a sales talk we always used in the hat department. "This is a very nice bolt," I gushed, "and you'll like it once you get used to it." The man looked as though he thought I was stark mad, and the office force laughed—that is, all but the boss. In the end I had to get the man the size he wanted. I haven't seen him since, so I think he must trade in some other department now for his bolts.

She was "broken into her job" by a hard-bitten former sailor who told her that she would get dirty.

"You'll find you have to take a bath twice a week," he warned.

Three for one

DOUBTLESS it is understatement to say that war has tripled the burden upon management. Proof that it is no overstatement is found in the election of three men to the three railroad presidencies formerly held by George D. Brooke, veteran of 40 years' service, who retires at his own request from the presidencies of the Chesapeake & Ohio, the Pere Marquette and the Nickel Plate, but continues to serve in a consulting capacity. Carl E. Newton, New York attorney who has been active in C. & O. litigation, becomes president of the C. & O. at 44 years of age. John Davin, formerly C. & O. vice president, becomes presi-

dent of the Nickel Plate at 50. Robert J. Bowman, formerly vice president of the Pere Marquette, takes the presidency of that road at 51.

Directors of the parent C. & O. point out in a statement that "in view of the increasing volume and complexity of the problems arising out of the necessity for maximum devotion of rail facilities to governmental needs in the war emergency, and for other reasons, it is felt that each of these roads requires the attention of a full-time chief executive." Mr. Brooke has been president of all three roads since 1937 and has been railroading since 1902. Few men have earned a better right to retirement.

Readin', writin', and coupons

SOME of our most venerable characteristics and habits will go by the board during this war. The most far-reaching and significant changes are well under way now, some of them discernible, some just beginning to take form. These heavy thoughts are inspired by what's happening to our national chirography. Our statisticians tell us that every month, millions of Americans are writing their dossiers on the backs of gas ration coupons about the size of postage stamps. They are required to set down their automobile license numbers and the state in which their cars are registered. This microscopic operation is bringing about the most profound chirographical revolution since Spencerian days.

Note to the National Association for the Preservation of Legibility in Penmanship: take notice that the simplified spellers have a golden opportunity.

This is grave news

THE GOVERNMENT'S simplification program is going to follow us right up to the grave. Even into the grave. Across our desk has come news that the Wood Casket Manufacturers' Industry Advisory Committee has met with the Consumers' Durable Goods Division of the War Production Board. The meeting had to do with reducing the number of casket designs and changing the dimensions so as to conserve lumber and rayon. Reassuring, however, was a statement in an official news release that "proposals discussed would not curtail production of caskets by any manufacturer or prohibit a reasonable choice of design and quality for all funerals."

There's something in a name

WHEN you speak of "Charley Wilson," be sure you designate just which one you mean. The name has magic in



NO PRICE CEILING—*but it's the most precious thing you can buy*

WATER — pure water from your kitchen faucet. Without it the human race would become extinct in 10 days. Without it, not a plane, nor a ship, nor a gun, nor a shell, nor a pound of metal could be produced. Yet the cost of a hundred gallons delivered to your faucet is about the price of a newspaper.

* * *

Today your water works officials and engineers are doing their job with less materials, less equipment and less labor than ever before. For instance, cast iron pipe is the standard material for water mains, but very little has been available for the past two years

except for war projects such as training camps, airfields, naval bases, ordnance arsenals, tank and airplane plants and shipyards, and their housing requirements.

* * *

Therefore, do not blame your water works officials if needed extensions and improvements to your water supply system are not being made. Meanwhile, remember that *more than nine-tenths* of the water mains of this country are constructed of dependable, long-lived cast iron pipe — the pipe that serves for a century. Those mains can be confidently expected to carry on for the duration and generations thereafter.

CAST IRON PIPE

RESEARCH ASSOCIATION, CHICAGO



NO. 1 TAX SAVER

G-E WARTIME LIGHTING CONSULTANT

scores again!



... Finds "white collar" job at machine!

A SIMPLE white collar added—yet it does an important job on this milling machine. It helps cut errors, waste and eyestrain—saves valuable time in making the tools of war . . . *by reflecting light on the vernier scale . . . making its figures easy to read.*

Put there by one of G-E's wartime lighting consultants, it is only one example of the application of G-E's practical knowledge of lighting for production. Often other simple suggestions can make a big difference—things like washing lamps and reflectors regularly; moving lighting fixtures to get rid of shadows and glare; painting walls and ceilings to get more light, and many others.

If you run a war plant—large or small—the services of a G-E wartime lighting consultant are at your disposal, without charge. These men are located all over the country—ready to help you get the most from your present equipment—*ready to help you put light to work.*

Why not take advantage of this service? Call the nearest G-E lamp office and they will place a wartime lighting consultant at your disposal. Or your local electric service company or G-E lamp supplier can give you helpful advice.



*Made to
Stay Brighter
Longer*



G-E MAZDA LAMPS
GENERAL  ELECTRIC

industry. There are at least three Charles E. Wilsons, for example, who are top-notch executives. Charles Edward Wilson resigned as president of General Electric to become vice chairman of the W.P.B. Charles Erwin Wilson is president of General Motors. Charles Eben Wilson is vice president of the Worthington Pump and Machinery Company. Other Charles Wilsons include widely-known lawyers, authors and diplomats. Must be a problem for the mailman.

Two views

MSGR. Fulton Sheen of Catholic University recently told the Eastern Association of College Deans and Advisors on Men that "a pat on the back will help build character if it is given often enough, hard enough and low enough." There's support in high places for that doctrine, as applied to the American people, although "pat" probably isn't a strong enough word for it. There's another school of thought whose view recently was expressed by Eugene E. Wilson, president of the United Aircraft Corporation, thus: "In America, the demand for power to compel is confession of incompetence to lead."

Preview of concentration

ELSEWHERE in this issue John S. Grover, in the article, "Planning Hits the Black Hills," demonstrates that planning must be more carefully conceived and carried out than was done in the closing of gold mines west of the Mississippi. The purpose of the War Production Board's order closing the mines was to free gold miners for work in copper mines. The impact of this order upon such communities as Lead and Deadwood, South Dakota, was devastating.

As though to prove Mr. Grover's point, the War Production Board, since his article was written, has granted "limited relief" from the provisions of the order to several gold mines, and setting up an appeal procedure by which other closed mines can obtain some measure of relief. The War Production Board stated that the appeal procedure was established because of "extreme hardship" in some cases, and because "experience has proved that the major intentions of the order can be filled even with the granting of such appeals."

It is to be hoped that this experience will lead the War Production Board to conduct careful inquiries and to interview many people before attempting any large scale concentration of industry. No one questions the Board's good intentions but its accomplishments must eventually be measured by its success.



FOR INDUSTRIAL FINANCING

Lack of adequate working capital is probably preventing many companies from doing a full-scale job of producing for victory.

Such companies need a second front—a new source of fast-acting, flexible financing, and we can help them.

Our financing plans are not handicapped by red tape. We do not tie you up with restrictions and limitations that may hamper your management of your own business.

If you are a manufacturer or wholesaler of products that are needed either for military

or essential civilian use, we are ready to provide an engineered financing plan to fit your special requirements. In many cases our financing facilities have been the major factor in aiding materially in wartime production and promoting profitable operations.

If you need additional working capital—thousands to millions—to finance current production on Government or other work, or to qualify for new Government contracts, we have specially qualified men to engineer a plan for you.

Write or wire Department 2300

Commercial Credit Company Baltimore

Subsidiaries: New York Chicago San Francisco Los Angeles Portland, Ore.

CAPITAL AND SURPLUS MORE THAN \$65,000,000

RESOLUTION FOR AMERICA

This year must be the year of decision.

This year, all over the world, *America fights.*

Our factories and farms are producing the materials to make that possible.

Our ships, planes, guns, tanks, are taking swift shape in numbers to accomplish conclusive results.

These things must now get there — get where they're needed, where they will be felt—get there swiftly, on time, without fail or falter.

The railroads have a part in that job—a big part.

They accept it.

They could do with more engines, more cars, more everything when materials can be spared for them.

Until then and after, railroads and railroad men will continue to work as they never worked before to get the job done.

If, now and then, that means inconveniences to you as a traveler, we are sorry. We are trying to avoid that, too.

But guns and the men who use them must come first.

The guiding rule of our lives — and of yours—must be *right of way for the U.S.A.*

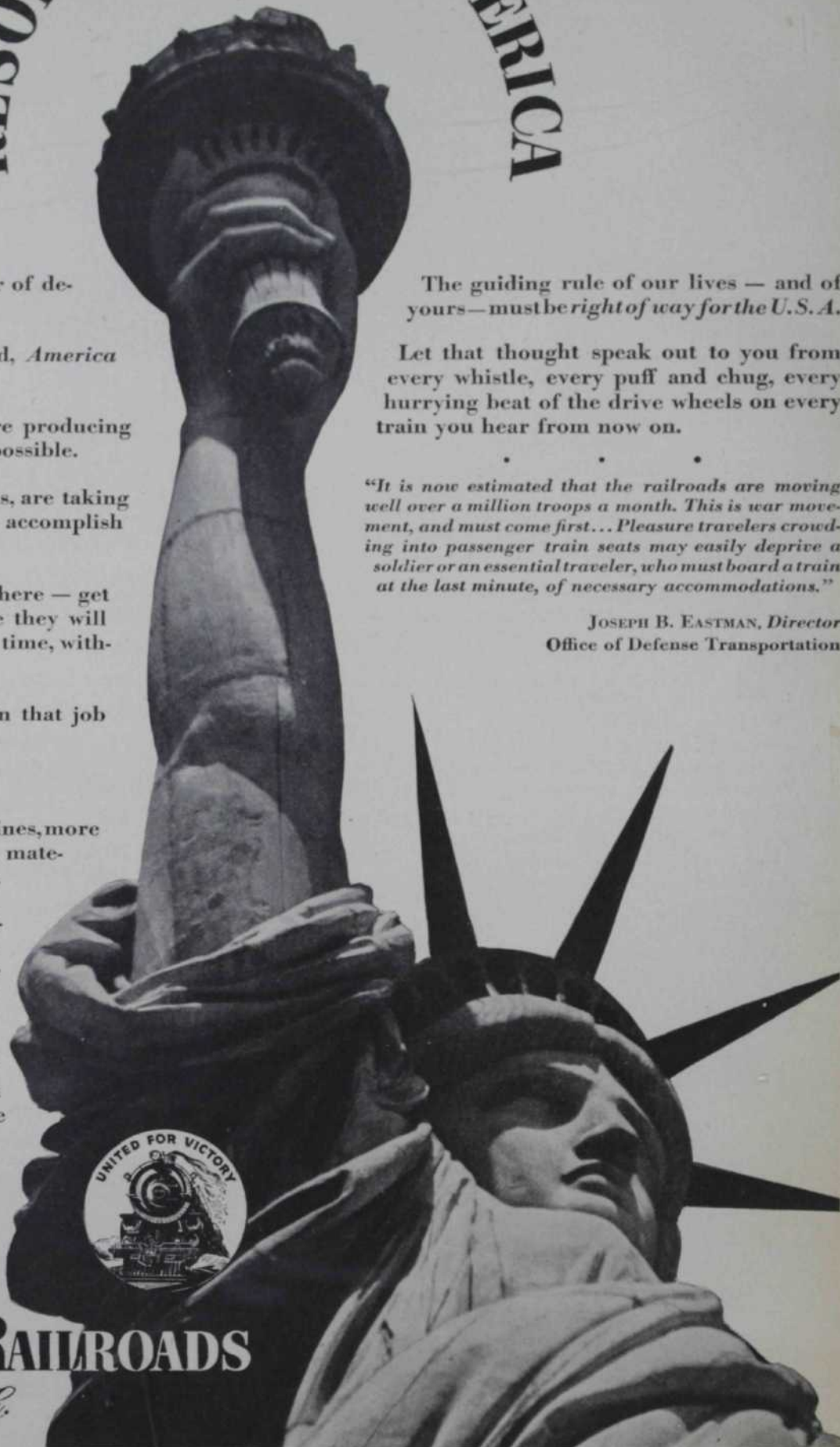
Let that thought speak out to you from every whistle, every puff and chug, every hurrying beat of the drive wheels on every train you hear from now on.

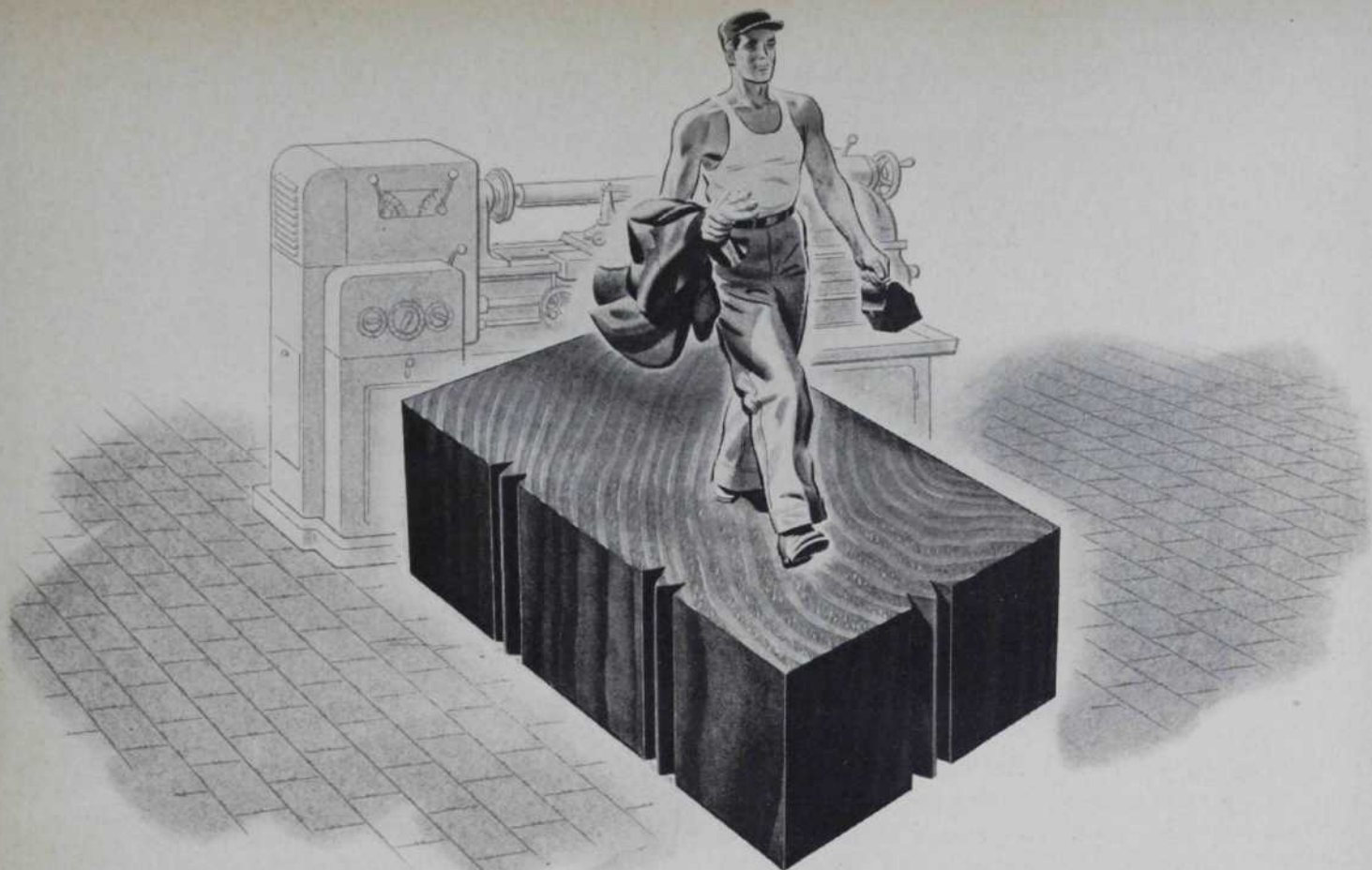
"It is now estimated that the railroads are moving well over a million troops a month. This is war movement, and must come first... Pleasure travelers crowding into passenger train seats may easily deprive a soldier or an essential traveler, who must board a train at the last minute, of necessary accommodations."

JOSEPH B. EASTMAN, *Director*
Office of Defense Transportation



Association of
AMERICAN RAILROADS
Washington D. C.





"Grit makes men...but breaks machines"

Grit (grit), n. (AS, *gréot* grit, sand, dust.)
 1. Determination, stamina, courage.
 2. Hard, coarse grained, fit for grinding.

In *men*, grit is needed for all-out effort.

In *machines*, grit destroys precision, wastes time, costs money.

There is no abrasive dust and sand in KREOLITE Wood Block Floors to flake off and ruin vital machine bearings. KREOLITE gives you a supple surface that stands daily pounding without cracking, chipping, or disintegrating into dust. The "give" in the selected wood also saves tools and parts accidentally dropped. KREOLITE Floors help maintain even temperatures and humidity needed for precision production.

The resiliency of KREOLITE factory floors keeps workers' feet "at ease" and conserves energy for productive effort. Industrial noises and vibrations are absorbed. KREOLITE insulates floors against extreme heat, cold, dampness.

KREOLITE Wood Blocks are all tough end-grain Southern Pine, pressure-treated with KREOLITE Oil for long life. Patented lugs prevent bulging and a coating of KREOLITE *Jennite* makes a floor water and sun-proof, acid and oil resistant. KREOLITE Floors are easily spot repaired when it is necessary to move machines.

It is our responsibility to keep a Jennison-Wright flooring engineer in your vicinity. His services are available, without obligation, to study facts and figures about *your* floors.

THE JENNISON-WRIGHT CORPORATION
 TOLEDO, OHIO • 23 Nation-Wide Offices

KREOLITE WOOD BLOCK FLOORS



Simonds Saw & Steel Company's windowless factory, Fitchburg, Mass., uses 116,000 sq. ft. of KREOLITE Kounter-Sunk Lug Wood Blocks to pave its controlled conditions plant.

★ ★ ★

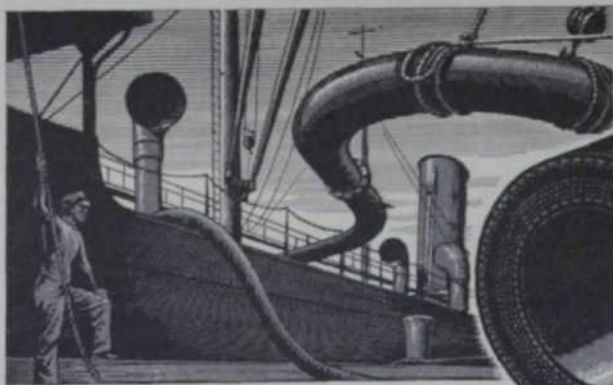
Specify KREOLITE...Accept No Substitute

Comfortable to Work On • Dustless, Easy to Clean
 Absorb Noise, Cut Vibration • Low Maintenance
 Protect Dropped Tools and Parts • Durable
 Insulate • Spark-proof, Skid-proof, Safe
 Firm Base for Machines
 Quick to Install, Easy to Replace



KREOLITE RAILROAD SWITCH & INDUSTRIAL TRACK TIES • PILING • BRIDGE & DOCK LUMBER

ONE OF A SERIES OF INFORMATIVE TALKS ON A CRITICAL MATERIAL



Section of Chemigum-lined fuel oil hose used in loading tankers

No, America was not asleep on **SYNTHETIC RUBBER**

IT seems to be a somewhat common impression that up to Pearl Harbor synthetic rubber manufacture was a Nazi-controlled monopoly; that America was asleep to its possibilities until our natural rubber sources were lost.

The truth is, as early as 1927 Goodyear chemists had developed a synthetic very similar to natural rubber in structure and properties. This process was patented in both the United States and Great Britain.

Nearly two years before the war began in Europe we had advanced the art of synthesizing rubber to the point where tires made with our product, now called Chemigum, actually outwore those made with the best natural rubber. But the high cost of producing Chemigum at that time made the price of these tires prohibitive.

Nevertheless, Goodyear proceeded to build America's first complete plant for producing synthetic rubber of this type, and began the commercial manufacture of Chemigum for certain industrial uses where its impermeability to solvents

makes it vastly superior to natural rubber.

Since 1938 we have made large quantities of fuel oil and gasoline hose, pipe line connections, gaskets, printers' rollers and press blankets with Chemigum. In 1940 we added bullet-puncture-sealing linings for gasoline tanks and numerous other items for warplanes.

When America went to war our entire facilities were immediately devoted to producing for our armed forces many needs that had previously been built with natural rubber. Large new plants since built as part of the government's war program are now providing synthetic rubber in a steadily increasing quantity for a wide variety of military uses.

This rapid wartime expansion is bringing about new low-cost methods of producing synthetic rubber which, combined with our twenty years' experience in developing synthetics, assures America of high-quality tires and other rubber goods at reasonable prices—as soon as production capacity exceeds military demands.



THE GREATEST NAME IN RUBBER
GOOD YEAR

Chemigum—T. M. The Goodyear Tire & Rubber Company

Warning: Red Light Ahead!

EVERYMAN and his conscience find these troubled days, indeed. "Am I unpatriotic?" "Am I so selfish that I can only criticize?" These are the questions with which he faces civilian regimentation.

Yet, this mixture of patriotism and petulance runs deeper than the state of our nerves or our normal desire for life as usual.

The distinguished historian Ferrero, in "The Principles of Power" makes clear certain phenomena in our own domestic economy of 1943. He does not mention the United States; but the principles he discovers throughout history can be definitely applied to our own times.

Any form of government or its administration, he says, gets its sole authority from custom. What the people have been accustomed to expect from their rulers is to them the "legitimate" kind of government. That is why the French people once voted against the election of their chief executive by popular choice. They were accustomed to an aristocratic-monarchy. That is why the people of Germany never accepted a popularly elected President, nor in fact accepted a republican form of government. They would not long respect an authority which was not traditional and, therefore, not "legitimate."

Today, in the United States, there are many manifestations of these historical principles. It is one reason why rationing plans are not wholeheartedly accepted. The principle of rationing and of sacrifice is accepted, yes, but administrative methods are so contrary to the American traditional ways of doing things that there is widespread unrest.

The sudden emergence of a bureaucracy with

powers is the root of the matter. As long as bureaus and commissions confined themselves to research and reports, the American people made no issue of the practice. Now, with Washington agencies invading the fields of local affairs, with regulations carrying fines and imprisonment, with absentee administration, the people, not recognizing them as "legitimate," that is, as the accustomed methods, cry out against them.

Three examples come to mind: The fixing of contracts in non-war work by Executive decree, between employer and employee, as in the Montgomery Ward case; the limiting, by Executive order, of the amount a man may earn; the rationing of fuel oil on the basis that a citizen does not need "such a big house." It is doubtful if these radical measures are yet accepted by the people as "legitimate" government.

The lesson today is that, in meeting war's emergencies, our regulators, by deed rather than word, must give continuing proof that they intend no different and unusual form of government. The burden is on them that they do not intend "to make the duration last longer than the war."

Rationing and regulation and concentration of industry will be accepted during the war, when shown to be necessary to win the war. Freed of the suspicion that civilian regimentation is inspired by a continuing zeal for "reform," the American people will respond as never before to the end that the home front makes full and immediate contribution to the success of its sons and brothers on the battlefield.

Merce Thorne

"CUDAHY OF CUDAHY" USE TRUCK-TRAILERS TO DELIVER MEAT FRESHER AND BETTER FOR AMERICA'S WORKERS!



The label "Cudahy of Cudahy, Wisconsin" means best quality meats to the large section of the United States served by this veteran packing company.

But since Cudahy began using insulated Fruehauf Trailers equipped with refrigerating units, America's workers are getting even fresher, better meat.

Consider their Detroit market, for example. Meat leaves the packing plant in the afternoon and reaches Detroit . . . 396 miles away . . . before the next dawn.

That extra freshness is worth a lot to Detroiters . . . both dealers and consumers. Quicker delivery decreases the usual shrinkage. There is absolutely no spoilage . . . previously the source of occasional serious loss. Meat is better protected during loading, as loading and chilling time for the Trailers is only 90 minutes.

Truck-Trailer delivery means a lot to the Army, too, for much of this fresher meat goes to the Quartermaster Depot in Chicago and various military posts.*

There have been many advantages for Cudahy, also, in using Truck-Trailers. Costs for icing are substantially reduced! Handling costs are considerably less since the Trailers carry cartons, peppers, alkali and other supplies on the return trips . . . so they are continually in productive use. On the other hand, rail cars return empty and require 6 to 8 days for the round trip to Detroit.

Many thousands of Truck-Trailer users in more than 100 lines of business have had a similar experience—better service for customers and a more efficient, money-saving operation plus, frequently, a substantial gain in sales.

World's Largest Builders of Truck-Trailers

FRUEHAUF TRAILER COMPANY • DETROIT

Sales and Service in Principal Cities

* The use of Fruehauf Trailers as mobile refrigerators, to be left at cantonments until the next refrigerated Trailer arrives, is a practical application. The truck bringing the new Trailer can take away the emptied unit.

FRUEHAUF *Trailers*
"ENGINEERED" TRANSPORTATION
REG. U. S. PAT. OFF.

★
ANOTHER EXAMPLE OF
HOW TRUCK-TRAILERS
ARE AIDING AMERICA!
★



Truck-Trailers
CONSERVE RUBBER, STEEL,
GASOLINE, MOTOR POWER

Smaller Trucks Used—Since a truck, pulling a Trailer, can haul as much or more than a far bigger truck can carry, the large motor units are released for military work for which they are essential.

Rubber and Steel Conserved—A Truck-and-Trailer combination uses about 16% less weight of tires and 25% less steel than do the 2 trucks required to carry the same load.

Fewer Trucks Used—Many companies, previously operating fleets of trucks, replaced some of them with Trailers . . . and now move the same tonnage with fewer power units. "Shuttling" saves still more trucks.

Gasoline Conserved—A truck, with a Trailer, uses far less fuel than the one large truck or several small trucks it replaces.



TRUCK-TRAILER TRANSPORT IS DOING AN ESSENTIAL JOB FOR ALL AMERICA

Questionnaires or Bombers?

By A. H. SYPHER

"WE can go no further."

That expression was an opening shot in a revolt of America's war-time business against the excesses of regimentation.

It was fired by a business executive whose plant is packed with war work—including the processing of blood plasma for emergency use on the fighting fronts and the production of vaccine to protect the nation's soldiers.

He had come to Washington to bring into the open a demand for relief from the questionnaires, forms and reports which are flooding his offices and absorbing the energy of his war-rushed organization.

He sought no relief. He had taken it.

"Until this big questionnaire came along," Ernest Brier of Parke, Davis & Co., Detroit, told the Senate Committee on Reduction of Nonessential Federal Expenditures, "we were just about keeping our heads above the water in cooperating in every way, but we can go no further."

There was no threat in his voice. Only resignation. But the O.P.A. questionnaire was in his hand as he spoke in mid-December. It should have been filled out and returned, according to instructions, by Nov. 7.

Mr. Brier did not stand alone. Resentful references to "Gestapo methods," serious questions as to purpose, considered complaints about the cost, the manpower involved and the irritations resulting from the prying inquiries were voiced in the marble-columned hearing room.

Listening carefully were United States senators. They were giving a preview of the service those in control of the new Congress hope to render to the American people.

Their hearings brought the first real sign of checks on the free-handed exuberance of government war agencies that heretofore had been cracking whips without restraint.

The hearings began with a brief flare of catchy headlines and colorful quotes. But the real significance of the testimony was seldom carried in newspaper reports cut and crowded by fast-breaking war news.

Business men, industrialists, and farmers, in person or through their representatives, spoke out against the impossibility of producing for war and at the same time trying to quench the in-



BLACK STAR

THE TIME has come when we must either make war materials or fill out O.P.A. reports, business men say. We can't do both at the same time

quisitors' insatiable thirst for detailed information they did not have and could not get.

They spoke before friendly auditors. Sitting as chairman of the committee was Senator Harry F. Byrd, Virginia Democrat. At his left sat Senator Arthur H. Vandenberg, Republican, of Michigan; at his right, Senator Kenneth McKellar of Tennessee, Democrat and ranking majority member of the powerful Senate appropriations committee.

They sat as a committee of a Congress that saw in last November's elections a popular resurgence against the annoyances of unchecked bureaucratic government.

Also sitting with the committee was Secretary of the Treasury Henry Mor-

genthau, Jr., who listened with what appeared to be cool distaste for the testimony he heard.

In that testimony was the statement that reports demanded by the Government are adding ten per cent to the war construction program—a cost the taxpayer bears several times, since he must pay for the forms and also the governmental manpower to tabulate, digest and make use of the information collected—if use is made of it.

Nearly every witness expressed doubt of that. The Eastman Kodak Company representative said that each month the company devotes to reports enough man-hours to build a Flying Fortress, and that "75 per cent of them are either unnecessary or of doubtful value."

The Eastman organization, said George B. Roscoe, of the National Association of Manufacturers, filed 262 periodical and 147 special reports in one three-month period in 1942. He told the committee:

The company estimates that executives and supervisory personnel spent 1,200 hours preparing these reports, an expenditure which the company asserts "is of time by men in high positions out of proportion to the importance of the item being considered."

The Worthington Pump & Machinery Corporation, employing 4,000 persons, submits 545 reports to federal agencies each year, he said, including 66 different types which go to 12 different bureaus.

That is in addition to 478 other reports per year to 80 state, county and city governments.

The reports vary in length from one to 20 pages, include from ten to 100 questions each, and cost \$90,000 a year.

Eighty-nine companies surveyed by the association found that report-making takes up 495,480 man-hours a year, Mr. Roscoe reported. Eighty-four said they were required to complete 3,479 in a three-month-check period—an average of 164 per company per year.

The machinery group expressed the opinion that 43 per cent of the reports made were not necessary.

Eric A. Johnston, president of the Chamber of Commerce of the United States, told the committee that business men understand the need for information to run a government, even in peace-times.

"And, in war, of course there must be even more information," he said, "but we think this subject of questionnaires has gone far beyond anything that is essential:

As a matter of fact, they have become so voluminous, so difficult to understand and so complicated that I think every business man ought to open his mail in the morning singing "Praise the Lord and Pass the Inquisition."

There is one shortage the American people would certainly love to see, and that is a shortage of questionnaires.

Mr. Johnston commended the start the President has made to check questionnaires by ordering all agencies to obtain, before issuance, approval by Director of Budget Harold O. Smith, who is advised by a committee of business representatives.

"But we think this has not gone far enough," Mr. Johnston said. "It seems to me we ought to conserve manpower rather than have more manpower used in trying to answer these questionnaires and, in the Government, trying to prepare them."

A collision of one war agency with another, catching the war producing business in the middle, was described

by Clarence M. Van Kirk, vice president of E. R. Squibb & Sons, manufacturing druggists, of New York City.

"First, by competitive bidding, our problem is to place ourselves at the disposal of the Army and Navy," Mr. Van Kirk explained. "Those bids are complicated. Obviously they involve certain standards for the services that differ from peace-time requirements.

"We have bid on about 600 different items involving some \$41,000,000 in the past 90 days. That takes practically all of the time of our accounting staff. That work we do first, and intend to continue to do first."

But, in addition, the accounting department last year filled out Govern-

ment forms at a total cost of \$72,500. Mr. Van Kirk said, not including one from O.P.A. which, when and if it is completed, will be four feet long and 20 feet wide.

In October, he said, two O.P.A. agents called at his New York offices to explain that, thereafter, any change in the size, style or shape of the container or formula of any product must be regarded as a new product. That meant that the company must submit to O.P.A. an application covering each change, no matter how insignificant.

These reports call for a full description of the product, the formula, the form in which it is sold, the kind of con-

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"We're Going to Be Closed Up Anyway"

By FRED A. BAUGHAN

AS general manager of the Retail Food Dealers Association of California, Mr. Baughan represents more than 1,500 independent retailers. This is his digest of his testimony before the Senate committee inquiring into federal bureau expenditures

THE O.P.A. is driving retailers out of business.

Let's use coffee to illustrate how their senseless rules, regulations and policies are doing just that.

Under the percentage markup formula, different stores have different markups, or profit margins. A little corner store—we call them papa and mama stores—generally has a larger markup than a big chain.

Using round numbers for clarity, let's say a package of coffee costs the mama and papa store \$1. He has an 11 per cent markup, so he sells the coffee for \$1.11.

The large operator would buy the same package of coffee for approximately 90 cents, having greater buying power. He is limited to a seven per cent markup. So the large operator must sell this package of coffee at 96 cents—four cents less than it cost the papa and mama store.

The large operator hasn't asked for this situation. The O.P.A. forced it on him. That one situation alone eventually will bring about a closing of all independent stores and only the large chain stores will be able to operate—not be-

cause they want it that way, probably because O.P.A. wants it that way

Then O.P.A. could say that the private food distribution system has broken down and take over the chains as their federal food commissaries.

The number of reports the food industry has to make is almost inexhaustible. In April we got the Maximum Price Regulation No. 1. We were required to post ceilings on some 5,000 units of commodities, each in from two to ten different brands and each brand in from two to ten or 15 sizes.

The list comprises approximately 6,000 entries. That was filed by June 1. In May we got Maximum Price Regulation No. 2. This required detailed information on each item in the store, except the ten per cent not under ceilings. It required four different units of information in the listing of each item. We haven't digested that one yet.

Now we get Bulletin 238—with an inch and a quarter square we don't have to fill in. That asks for 12 separate units of information on from 1,800 to 3,600 items in the retail food store.

And we have to keep the old lists, too, so the O.P.A. can come in and check up on us—or the self-appointed housewife super-snoopers following the suggestions in news releases put out by the O.P.A.

The O.P.A. is threatening to close us up for any infraction of the rules under the licensing provisions of the act. But it makes no difference whether they do or not. We're going to be closed up any-

(Continued on page 79)

Congress Comes Out Fighting

By BEN CARLISLE

COMPARING the contestants as legislators and bureaucracy square off for a showdown battle

A NEW and robust Congress moves into the Capitol this month, while the nation watches with high expectations. The national excitement has some of the same emotions inspired by a cry of "Fight!" on a street corner. Figuratively, we are all crowding around to witness dramatic action.

Only a few months ago, Congress lacked this knack for quickening the national pulse. Congress was, in fact, the least influential of Washington's war-time agencies. Overshadowed by the bureaucracy it had created, it was bewildered and jittery.

Then came the November 3 elections with a political upheaval which was interpreted as a national mandate for

Congress to put its foot on the tail of reform and resume its rightful place in the triumvirate of democracy. Now Congress is met and its foot is poised.

Where will it put it down?

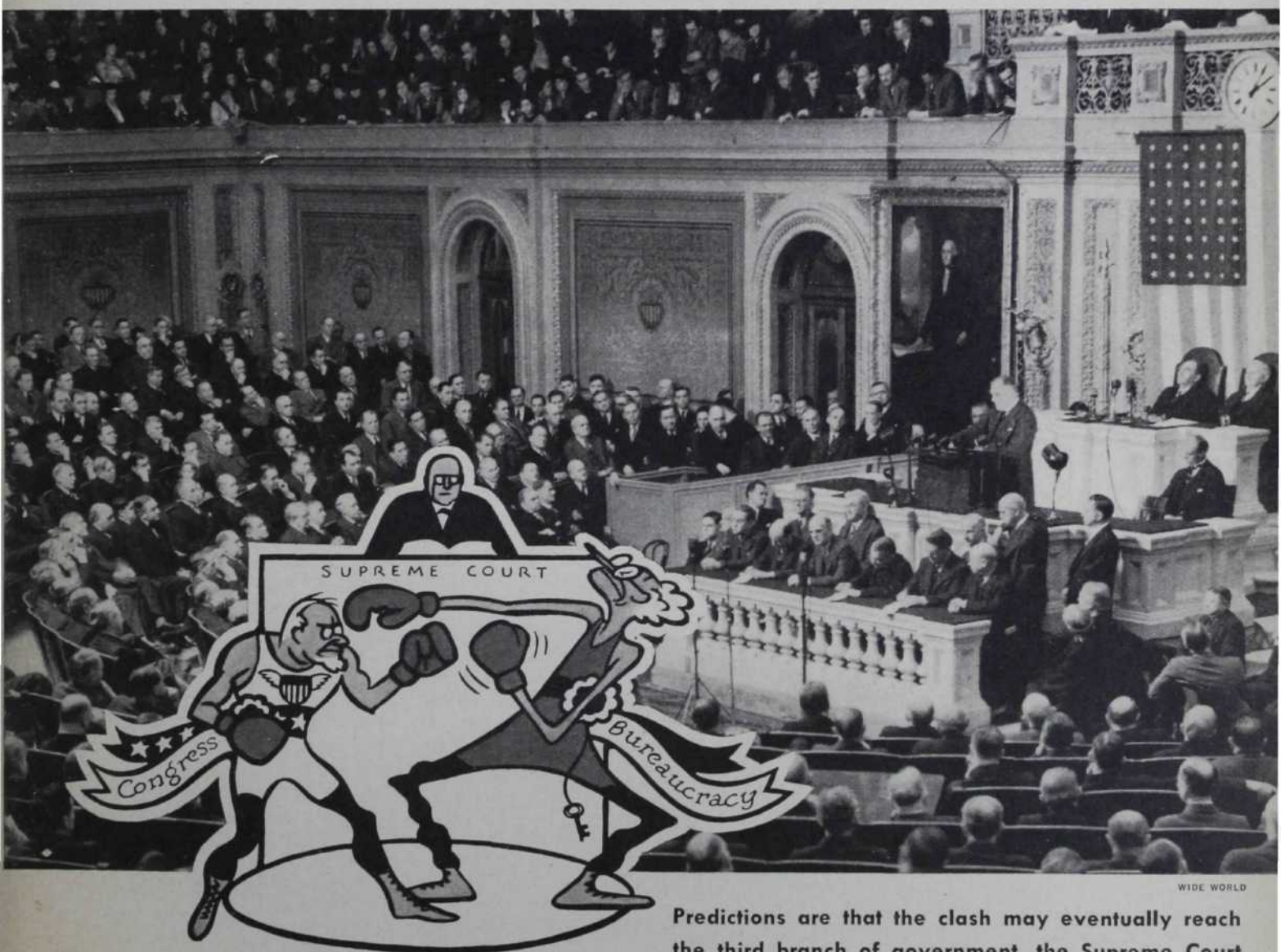
To begin with, those who expect a congressional hurricane to spill the apples of reform off the governmental tree are going to be disappointed. It is doubtful if any so-called social gain will be lost. Congress, most observers believe, interprets November balloting less as an attack on recent laws than as discontent with muddled adminis-

tration. Political conservatives, by nature, deplore the upheaval of retrogression as much as upheaval of installation. Rather than abolishing they will try to make the new laws work.

Few expect to see labor's gains wiped out. There will be agitation against the 40 hour week, perhaps ending with some practical plan by which it can be maintained in big industries, relaxed for smaller businesses which can't afford it.

Social security may be expanded.

(Continued on page 72)



Predictions are that the clash may eventually reach the third branch of government, the Supreme Court

Friends'



"I want you to send Buck Todd to the Army. He's the renter on my farm and I can't get rid of him"

IT IS a privilege as well as a responsibility to serve on a local draft board. The almost universal acceptance of local boards' decisions is a striking demonstration that men will fight—and die if necessary—to preserve democratic self-government.

The board on which I serve is in a rural county. All three members are veterans of the War To End All Wars. One is a banker, one a merchant, one a farmer. So far we have been able to meet every call for men. We have had two appeals and, in each instance, our decision was upheld.

We have tried to follow a few common sense rules:

One: To have all the facts regarding a case at hand before making a decision.

Two: To classify each man fairly in respect to other men, realizing that every case has individual angles.

Three: To be open-minded to all sources of information but never to be unduly swayed by outside interference.

Four: To avoid committing ourselves as individuals. When a registrant talks to us separately we tell him that we cannot express personal opinions. We

invite him to appear before the board where his case will be heard and decided in conformity with regulations.

Patriots and objectors

SOME of our experiences are amusing, some sad, and many inspiring. They are as contradictory as human nature itself. We have had a few letters from boys who threatened to commit suicide if inducted. All of them who passed the physical examinations are in the Army and making good soldiers. We have had anonymous letters demanding that certain boys be—or not be—inducted.

We have had some chiselers. A few registrants who had served prison terms have begged us to get them into the Army so they could redeem themselves. It sums up like this:

Everybody realizes that the war must be won. A few still believe that some other young men or some other people's sons should do the job.

There was, for instance, the doctor who interviewed each board member detailing reasons why his son was unfit

for military duty. He presented a list of diseases from which his son was suffering. The boy was the picture of health, but the Army doctors found that he had a disability that put him in 4-A. And his ailment was not on his father's list!

Another father told me his son should be deferred.

"Because," he said, "I served in the Spanish-American War."

I said to him, "Jim, we can't win this war by recalling the other battles we've won. This is a new fight and a tough one."

The boy volunteered the next week and is making a good soldier. And is his father proud of him!

I once knew an old lawyer who often said, "Confound the man who writes a letter."

Sometimes our draft board feels a desire to paraphrase this to say, "Confound the man who gets into print." Conflicting newspaper stories and apparently ambiguous statements attributed to General Hershey cause us more grief than any other phase of our work.

Recently an elderly farmer accosted me thus, "I want Buck Todd sent to the Army right away."

"Wait a minute," I said. "Selective Service has no right to put any man in the Army unless his number is up and his questionnaire shows that he is eligible to go."

"I got papers here to prove he ought to be there right now." Out of his pocket the farmer took at least 20 newspaper clippings. "Here's what General Hershey says about a case like this...."

I explained that we can't be influenced by newspapers. I got out my file and showed him the official regulations.

At last he conceded, "I always knew newspapers were liars. But you can't talk me out of putting Buck Todd in the Army. He's the renter on my farm and he won't move off until his lease

Lives Are in My Hands

By A DRAFT BOARD MEMBER

DECENTRALIZED authority proves its advantages as men who know community conditions carry out thankless task of picking men for Army

is up March 1. The only way I can get shed of him is to get him in the Army. Why, he's loaned my disc harrow and busted up my mowing machine. And he's using the barn doors for kindling."

Snobbery and flag waving

I TOLD the farmer that, when Buck Todd's case came up, I would keep in mind what he's told me. Personally I agree that Todd belongs in the Army. But imagine trying to twist Selective Service regulations to send a man with three children to the Army—just because he is burning up his landlord's barn.

Sometimes flag waving backfires. Early in the draft a local woman repeatedly stopped me on the street:

"I do wish there was some branch of the service where my husband could get in. It's too bad Archie has false teeth..."

The ban on false teeth has been lifted and the allotment law has necessitated the reclassification of married men with wives only. Now, Archie's wife can think of a dozen reasons why Archie should not go.

College students and their parents occasionally present a picture of snobbery that doesn't fit in with the democratic way of life. Parents of one such student—majoring in philosophy—came with him to interview our board.

The father explained, "Danny has

one more year at State University and we and his teachers feel that superior students like Danny should be kept in school and prepared for leadership after the war is over."

One board member asked, "What's he going to lead, in case we lose the war? Better get into service, son, and lead a group of soldiers."

The mother blurted the truth: Danny had sacrificed R.O.T.C. for college dramatics and debate. Danny would have to be a private.

She began to cry.

"Danny has always been a leader. I can't bear to have him go as a private. Why, that Bill Ragley quit school at the eighth grade and went to work because his father drank and wouldn't support the family—and he's a sergeant. I'll die of disgrace if Danny has to go in as a common private."

We reminded them that all boys look alike to us and that Danny was 1-A, since regulations made no provision for de-

ferring philosophy students. The next week Danny enlisted in the Air Corps reserve with permission to keep on at school until he was called for active duty.

Next time he was home he came to see me and told me he was going to summer school so he could finish his schooling at Christmas time and be ready for service then.

One of the cruel things is the criticism leveled at boys rejected because of physical handicaps. Roger is such a boy. He is well built and apparently in good health. He has a job that requires no hard work and allows him to be dressed up. Naturally the community singled him out as a likely prospect for the draft "because it would do Roger good to get roughed up a bit."

But Army doctors rejected him. Then disappointment loosened community tongues. The most suspicious suggested that his well-to-do parents had paid the draft board to get him off. Somebody pointed out that Roger's whole family were registered Democrats and that the chairman of the county democratic committee recommended him for his



"Danny has always been a leader. I can't bear to have him go as a private"

present job. No wonder Roger didn't have to go!

Although this all happened months ago, I am still asked oftener about this case than any other, and Roger is mentioned in most of the anonymous letters I receive. I am not at liberty to discuss the details of his case and it is pretty hard for me to help him, particularly because Roger is sensitive about the nature of his disability. I have advised him to confide in a few young men and see if they can't help put him in a different light. But he says that anything he could do now would only make things worse. He may be right.

Loafers go in

SOMETIMES young men who are deferred do foolish things. One young fellow whose aged father owns and operates several farms on a landlord-tenant share basis was put in 2-A because he was needed to oversee the work of food production. Soon he began to drive around the country "trading" in livestock. The situation reached a climax when one of his tenants left and there was nobody on that farm to do the chores, including milking ten cows. The young man remarked in a local

take care of my boy over there as well as at home."

Occasionally a boy, about to be inducted, says to me, "If you would only talk to my mother! Maybe you could make her understand how I feel about doing my part. She's making such a terrible fuss that I can't bear it."

One lad had just concluded such a plea to me when he launched into this bit of exuberance:

"I can't pilot a regular plane because I'm color blind. But I hope they send me to a glider school. Boy, would I like to be a glider pilot! It doesn't matter if you're color blind when you're driving a glider. They just cut you loose 10,000 feet up in the air, and all you got to do is land her!"

My sympathies were all with that mother. I could well understand that, to her, piloting a glider was like riding a bolt of lightning down from the sky!

One of our gravest problems is deciding which men to induct and which to leave on the farms. We have tried to put the farm loafers into the Army and to defer the producers, whether they be operators, sons of operators, or hired men. A few chiselers have won temporary deferments but, in general, people honestly try to show the

is living at home, this registrant goes into the Army.

We have deferred young men to work on the farms only to hear shortly that they were working in town or in defense plants. So, now we handle our farm labor deferments differently. The case of Mr. Green's hired man will illustrate:

Mr. Green and his unmarried son operate a large farm together. Mr. Green is aged and the son is a semi-invalid. They are equipped to finance production of a huge poundage of hogs and beef, provided they can hire the help. They have had one hired man for years and now he comes up for induction.

Farm hands deferred

MR. GREEN, his son and the hired man all come before the Board, bringing a financial statement and an account of the farm's activities in the past five years, along with last year's income tax returns. Their proposition is this: From a personal standpoint, they are prepared to retire and live comfortably. But they would like to help win the war and the only way they can do it is to produce meat and invest their profits in war bonds. This they will agree to do with all their might, provided they can keep Barnes, their hired man.

The Board's decision was prompt: Barnes was deferred as long as he stayed on the farm.

Then I said to Mr. Green, "I see by your statement that you have been paying Barnes \$35 a month and board. Now, this is not a part of this Board's decision, but my personal suggestion: Barnes is making as great a contribution to the war effort as any man in America. Besides his present wages, why don't you buy him a war bond every month, to bring his pay up to that of a soldier?"

"I'll just do that," agreed Mr. Green, and they all went away beaming. We have several such producing partnerships in our county. Every rural community needs more of them.

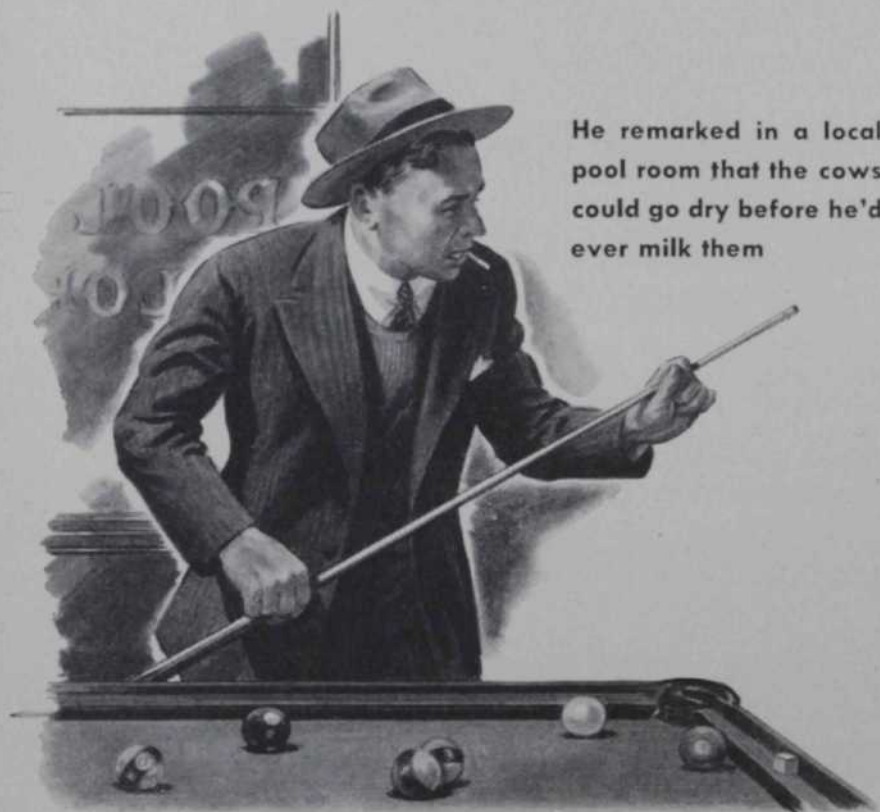
The hardest thing we do is induct young husbands who were married since May 27, 1941, the date of the President's Emergency Proclamation. Some of them have small babies or leave wives who must face childbirth alone. The quiet courage of these young people gets me down. I could stand any amount of wailing better than to hear a young wife say:

"We've been planning for this. Of course it will be hard, having Tony gone. But I'll have the baby."

Or, maybe a young man says, "I'm not kicking. I've got more to fight for than a fellow without a home of his own to come back to."

Or, perhaps they come together and say, "We knew when we got married

(Continued on page 73)



He remarked in a local pool room that the cows could go dry before he'd ever milk them

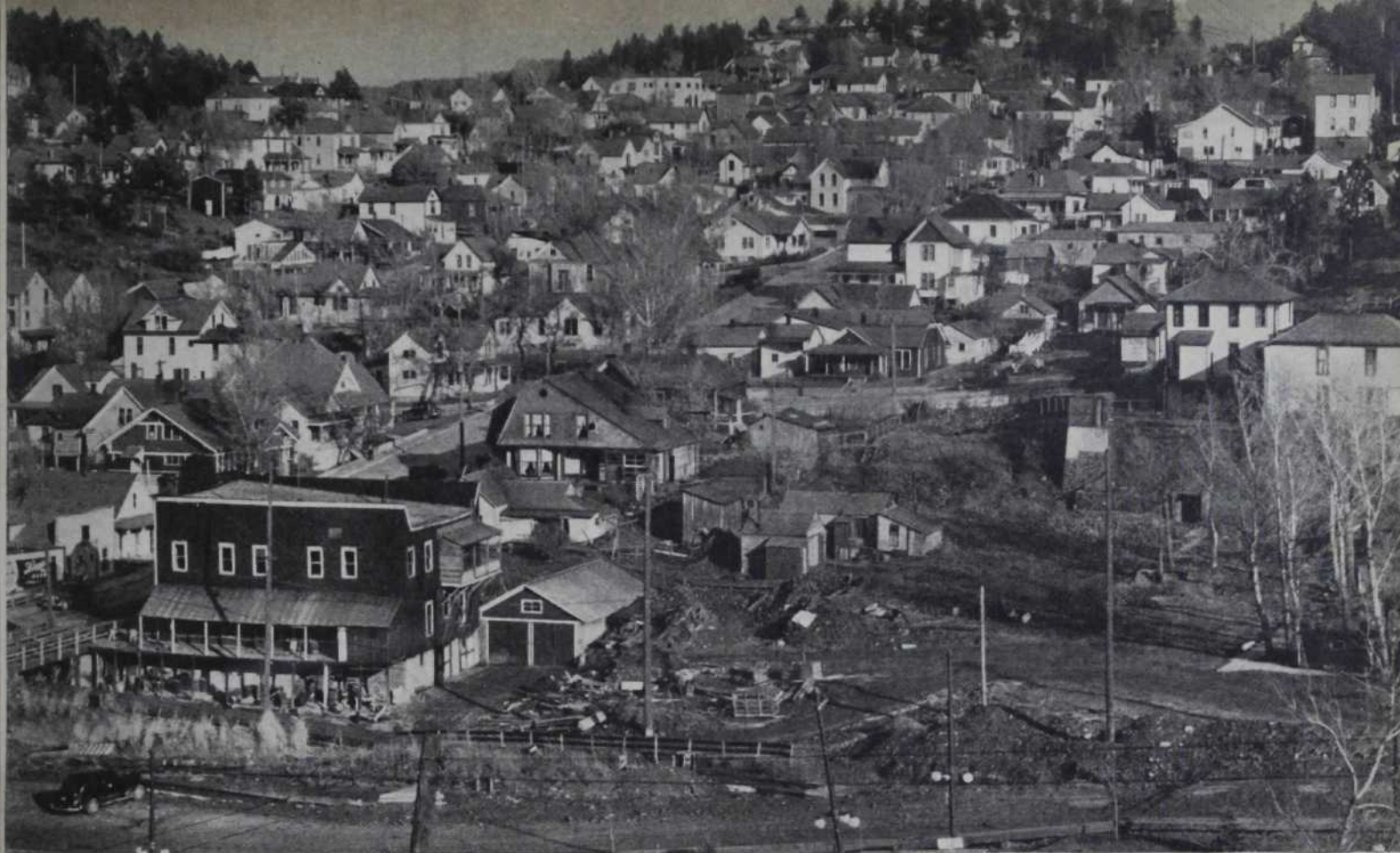
pool room that the "dam' cows could go dry before he'd milk 'em."

Then the draft board served notice on him that he must either confine his efforts to producing food or prepare to be classified in 1-A.

Most parents display real courage. Whether or not the war will bring about a religious revival, I do not know. But I do know that more and more parents are saying to me in effect, "God can

Board just what their true situation is.

A few young men have outlined a sizable farming layout, claiming that they have been farming on their own account for two or more years. But, if the county assessor's tax roll shows no personal property returns from those young men, we know something is wrong. If the equipment and livestock was assessed in the name of the registrant's father, and more than one boy



A prosperous city that W.P.B. may make a ghost town EWING G.

Case History in Concentration:

Planning Hits the Black Hills

By JOHN S. GROVER

GOVERNMENT'S first adventure in closing industry to shift manpower reveals the problems every community may face if the plan becomes general

THE TWIN CITIES of Lead and Deadwood, S. D., are the first laboratory where the effect of federal experiments in the control and enforced allocation of the war-pinchd labor supply can be studied in detail.

This first governmental excursion into the business of shunting labor from an industry adjudged non-essential into others deemed more vital deserves the closest study. It was here that the problems attending the wholesale dislocation of specialized labor groups first became apparent. They

may well become nationwide in scope.

What disrupted the stable economy of the Black Hills towns was the W.P.B. order forbidding the mining of gold west of the Mississippi after October 15, 1942, and the collateral directive of the War Manpower Commission that no employer should hire former gold miners unless referred by the United States Employment Service. I arrived in Lead within the week after that order became effective. I talked to citizens ranging from Guy N. Bjorge, General Manager of the fabulously rich

Homestake mine to Potato Creek Johnny, one-time prospector and now a familiar, 75-year-old patriarch in Deadwood's gambling saloons.

In addition, since returning to Washington, I have kept informed about the situation.

Since the days of Calamity Jane and Wild Bill Hickok, Lead and Deadwood have lived by and for gold mining. Discovered in 1876, the Homestake vein has been consistently the largest gold producer in the United States proper. Its pay roll of roughly 2,000 has supported Lead and Deadwood, the former with a population of 7,000 plus, the latter a town of 4,000.

Except for two smaller mining enterprises, Lead and Deadwood have no other primary industries. The retail, service and entertainment business depends entirely on the mine pay roll for economic life.

Naturally, the order closing the mines was a bombshell in the Black Hills.

The conductor on the train that took me into Newcastle, Wyo., speculated on its effect. I got plenty of comment from the bus passengers on the ride from Newcastle to Lead.

Government agencies averred that the labor shortage in the copper mines of Montana, Utah and Arizona, the Colorado molybdenum diggings and the Idaho lead-zinc operations made the order necessary to release hard-rock men to mine the critical war metals.

The U.S.E.S. set up a special office in Lead, manned by an augmented staff. The mine workers were informed that travel expenses for the worker, his wife and a maximum of three children would be paid to the essential-metal mine se-

lected. The worker was required to sign a three-way contract—the Government and the mine operator were the other parties—if he accepted the new employment. It specified in part that, if the recruit remained 90 days on the new job, the mine would pay his travel expenses. If he quit before 90 days, he was to repay the government advance.

Miners Unwilling to Move

WHEN I was in Lead and Deadwood, it was already apparent that the experiment had some serious "bugs." Miners made no concerted rush to sign up for work in the critical metal mines.

This indicates no general unwillingness to sacrifice for the war effort. The Black Hills record in war bonds purchased and men sent to the armed services is outstanding. It meant merely that the miners, the management and the business community were convinced their sacrifices under the order would *not* appreciably advance the war

effort. They were bitter and bewildered.

The workers (and the business men and executives I interviewed later) agreed that the order was half-cocked, loosely thought through, and destined to fail in its primary purpose.

Even waitresses and taxi drivers in Lead and Deadwood had the facts and figures to demonstrate that blacking out the gold mines would mean no important increase in the critical metals supply. It was a case where the people on the ground, who knew conditions, were a lot more "hep" to actualities than somebody in an office 2,000 miles away.

A progress report on the experiment a month after it became operative bears out their arguments in no small measure.

In that month, the Homestake and other mines in the Lead-Deadwood area had displaced 543 workers of approximately 2,250 men employed. Of the 543 laid off, 207 had actually reported to work in non-ferrous metals mines. Some 348 had been "referred" to new employment, and those who had not reported were presumed to be en route. In addition, 41 others had been referred to essential industries other than mining. There was no report on how many of the 41 referred actually went to work.

So, a month after the order became effective, something less than half the mine employees laid off were actually at work in critical metal mines.

(Continued on page 66)

Potato Creek Johnny,
Deadwood patriarch,
knew the idea
wouldn't work

Of Homestake's 2,000 workers, only 800 are miners. Others work above ground, will have no jobs when the mines are closed

BLACK STAR



A Plan to Make Industry Over

By G. A. BROWNING

IS closing of industry necessary or do we plan to do it merely because Britain did?

AERICAN industry is about to be made over.

Plans for concentration of non-war industry and drastic curtailment of all civilian production lie on the drafting tables of the War Production Board.

Few businessmen envisage the far-reaching disruption of the nation's economy it will bring.

Action is just ahead.

Whole communities and their non-war industries face the prospect of drastic dislocation, and in some cases even extinction.

A special W.P.B. committee has been at work on a concentration program ever since concentration was adopted as a policy last July. It has functioned without fanfare. Today each W.P.B. Industry Division is preparing, under orders, specific concentration plans for the industries under its jurisdiction.

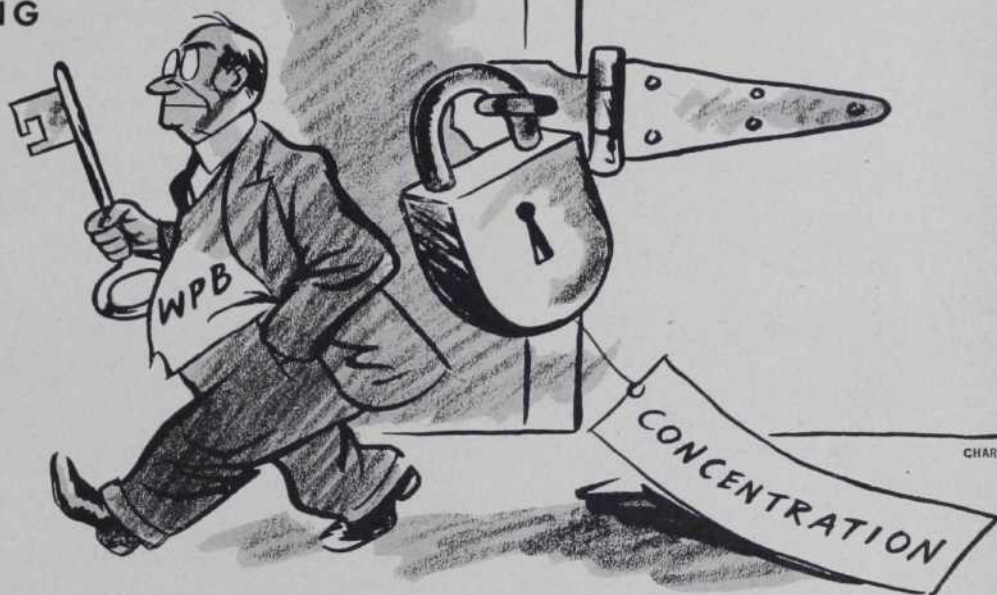
What is concentration? What is the necessity for it? Is there no alternative? Will its strong medicine be more likely to kill than cure? Is there a basic purpose of reform, rather than of conserving manpower and materials for war production? Have we decided we must concentrate here simply because Great Britain has done it, under dissimilar conditions?

These questions have scarcely been asked—much less answered, so far as the public and business know. Yet they bear heavily upon practically every citizen, every business, every industry in the land.

Thus far concentration has been attempted in the United States only in a few industries—among them stoves, bicycles and farm equipment. But the new plans will affect every non-war industry, from baby buggies to coffins.

Concentration means this:

Government will require most units of a given civilian-production industry to convert to war manufacture—or



Concentration means simply this: Most factories will be shut down, leaving production in the hands of only a few "nucleus" plants

close down. Some will be ordered to close without opportunity to convert. Government will assign a total production quota to the remaining "nucleus" units, each unit being told just how much it can manufacture. Presumably some attempt will be made to preserve identities, trade-marks and other assets which the suppressed concerns have painstakingly built up over the years. This may entail enormous government subsidies.

No one knows where concentration may lead, what its impact will be. The sociological consequences have received scant study. Even the planners concede that today's plans may have to be scrapped tomorrow. But any business man can testify that an industry which can be killed by a simple directive from Washington, can't be revived by another directive.

Consider, with an eye to things to come, what has happened in two industries already converted:

Of 220 pre-war stove makers, only about 90 remain. The original W.P.B. order put 90 out of stove production. Another 40 gave up the ghost because they couldn't operate under the quotas assigned to them. A recent survey shows that one classification of "nucleus" plants is meeting less than 40 per cent of the production quota assigned to it. Meanwhile military re-

quirements for stoves have risen sharply. Civilian demand for wood and coal stoves has shot skyward, due in large part to fuel oil shortages. Now the Government is frantically trying to boost stove production in a disrupted industry.

Production of farm machinery and equipment has been slashed 80 per cent by government order. The remaining 20 per cent has been allocated chiefly to small and scattered plants many of which lack adequate facilities, financing and sales organizations. With a food crisis impending, Government finds, for instance, that a little manufacturer in the East has no means of getting the plowshares he makes, into the hands of the farmers of South Dakota. So the Department of Agriculture is now pleading with the pre-war leaders in the equipment industry to lend their skeletonized distribution and sales organizations to the small manufacturers.

So important is the problem of concentration, simplification and standardization of non-war industry that the directors of the Chamber of Commerce of the United States have authorized a committee, selected primarily from production and distribution, to make a searching investigation of the whole subject and bring in recommendations.

Significantly, there is division within

W.P.B. itself over the wisdom and practicability of the concentration program. One group makes no secret of its suspicion that an effort is being made to use it as a vehicle for further "reform" under the guise of war necessity. Certain reform-minded government officials have advocated for a long time that big business units be broken up and their business given to small units, on the ground that bigness itself is a social evil.

As in most of our measures affecting trade and industry, one of the main arguments for concentration has been that "England did it."

England believed concentration necessary to release factory space and workers for war employment. But, even under that compulsion, Britain is not concentrating all industry indiscriminately. Trade-marked British goods continue to flow into export channels in large volume because, under the British plan:

Concentration is attempted only in industries which cannot be converted to war work.

Concentration is attempted only in industries devoted to civilian purposes.

Concentration is attempted only in industries in which production has been severely curtailed.

Since, when we commit ourselves to

concentration, we will probably use the British pattern, we ought, before we do it, to compare our situation with theirs.

First is the question of need:

Britain may have had enough factory and warehouse space before the devastating bombings. There is no doubt that there was a dearth of such space after the Battle of Britain.

Found too much space

COMPARED with this, we have hundreds of vacant factory buildings which could be put to war use. Once upon a time, W.P.B. set up an agency to find factory space. It was soon stopped because it found more space than we could use. The migration of workers from towns possessing factory space which could have been used to new plants presents one of the serious social dislocations of the war, and one which was largely needless.

In England, too, the problem of manpower has been acute. This is not the case in this country. Our vast supply of manpower is not organized for war. If there is a shortage of workers in agriculture or industry it will be necessary to draw some from other work, but not in such quantity as to require wholesale stoppage of industry. We have enough labor when it is listed, trained, and placed.

Coming to the kinds of industry which Britain saw fit to concentrate, we continue to find little similarity between conditions there and here. Whenever we are as hard pressed for war production as Britain has been, we may need some kind of compulsion to drive men out of "industries that can't be converted to war work." We don't need it now.

Hundreds of industries have pleaded for information about converting to war work, about the parts needed and the contracts to be awarded so that they could get in the scrap. They have written letters and traveled to Washington, too often to be turned away without a hearing. Whenever industry has been told what was needed it has set up for the job. Moreover, in a country where carpet makers can turn out gun barrels, costume jewelers make bomb fuses, and makers of bottle caps turn to building gun mounts, who is to determine what industries "cannot be converted to war work"?

As for the concentration of industries devoted to civilian purposes and those in which production has been severely curtailed, there seems to be little need here for that, either. Under present conditions in this country, these two groups of industry seem to overlap. Concentration of such plants, with us, has never been a problem.

When a brick plant has no orders, and sees none ahead, it shuts down, and the workers get other jobs. We have never had to tell lumber mills or button factories to go out of business. They do that with startling facility.

But, if, in spite of these differing conditions, we insist on concentration, we face several questions:

First, *What Plants Shall Stay in Business?*

Harder than it looks

BRITISH industry admitted the need for concentration most reluctantly, and advanced it with many reservations. The Government tried at first to have industries accomplish it voluntarily. A few did it with a measure of satisfaction. The greater number could not do it. When they failed, the Government imposed a plan, with varying degrees of cooperation asked of the industries affected, or offered by them. A study of the experience dispels the notion that concentration is easy, or that it can be done by formula.

There is little in reports on the British experiment to guide us in selecting "nucleus plants." But one element in the experience is especially interesting. This is the use of trade associations to work out the plan. In England, pressure is exerted to have all units join the associations, thus providing focal points for discussion and action.

(Continued on page 71)



Britain Looks Ahead . . .

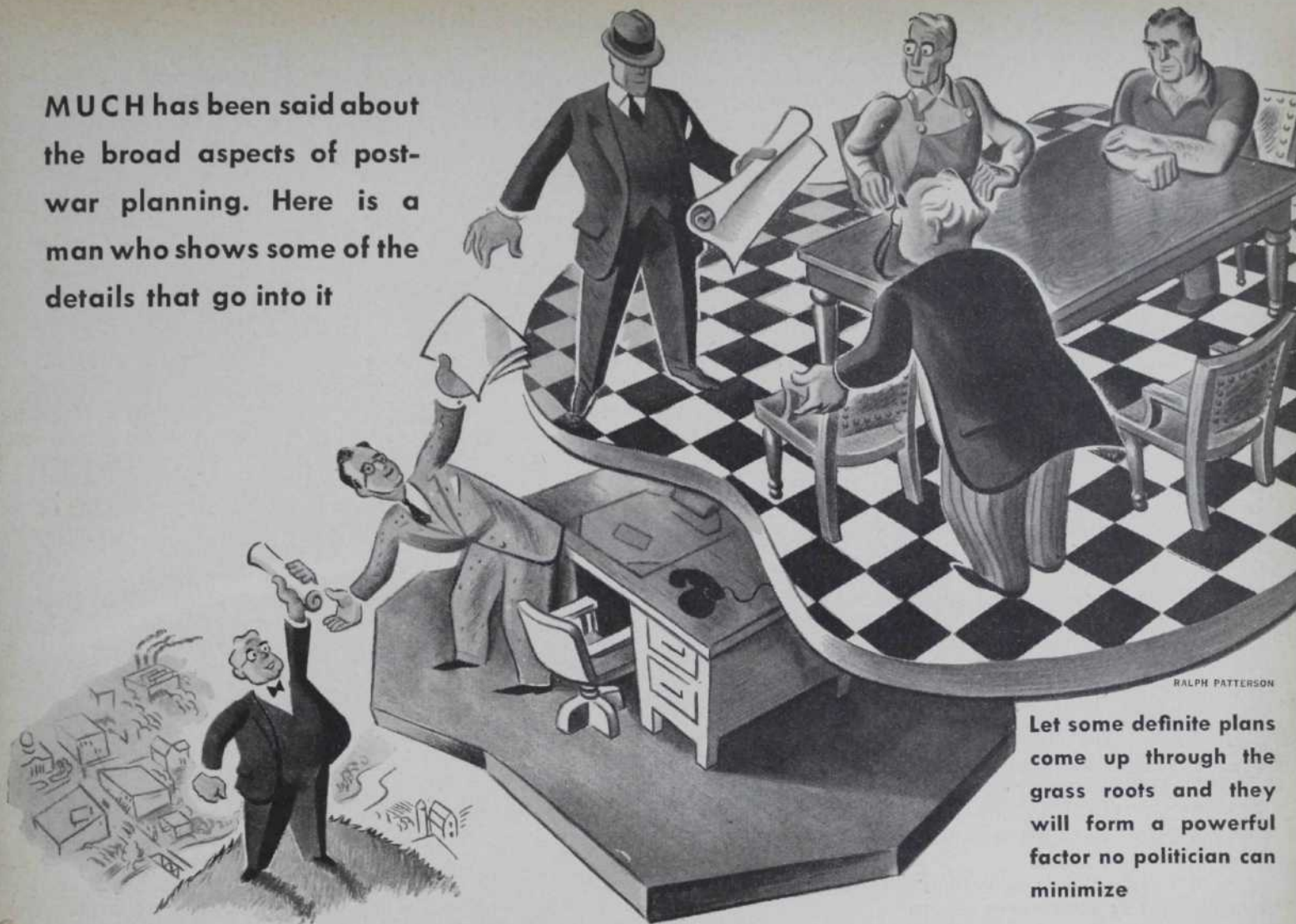
THE enthusiastic advocates of concentration as a means of conserving manpower are continually trying to prove their point by British experiences. This sounds convincing enough until people begin to think a bit. If British businesses are concentrated to the extreme extent certain officials here think necessary for the United States, why is it that the American public can still buy Burberry and Aquascutum overcoats so long advertised in England and here? Why is it that American stores offer Dunhill pipes, British trademarked and advertised shoes such as Peels, and numerous other British-made items?

There is a real war going on and Britain is doing its full part—but why is it that South American wheat growers can buy British trademarked and advertised farm machinery? Here we have the curious situation of certain theorists in the United States Government trying to proceed in a way which will cause individual trade-marks to lose their value. These trade-marks accumulatively form a great national asset both for export trade now and for post-war reconstruction. There is something strange about our whole approach to this problem and our failure to realize that, at its very best, concentration will save very little manpower. If hours were lengthened and manpower allocated more efficiently, there would be little need—much less excuse—for even considering concentration.

—FROM PRINTERS INK



MUCH has been said about the broad aspects of post-war planning. Here is a man who shows some of the details that go into it



Let some definite plans come up through the grass roots and they will form a powerful factor no politician can minimize

Where Do We Go from There?

By RALPH PRYNE

SOME morning in 1944—or 1945, or later—Partners Jones and Smith will enter their busy war factory with extra editions of the local newspaper in their hands; papers on which the one word, “PEACE,” will occupy most of the first page.

Their plant superintendent will be waiting to ask:

“Shall we begin production today on that new order for canteens?”

“How about letting that big run of ammunition boxes go into the punch presses?”

“Shall we continue to assemble the range finders?”

Most manufacturers engaged in war work will face similar questions on the day peace comes.

There can be no hedging, no delaying; they must be ready to answer on the spot.

To be sure, Manufacturers Jones & Smith and most other industrialists are already considering those answers and, in a measure, preparing for eventual

return to civilian manufacturing—but such planning has a habit of remaining somewhat nebulous and wars have a habit of ending suddenly. It is reasonable to assume, therefore, that many manufacturers will not be quite ready for a quick shift to civilian activity when “P Day” comes.

Will materials be available?

EVEN if the plans are ready, the problem of getting raw material remains. This material cannot be instantly available in the semi-finished state in which practically all manufacturers require it. Just how, then, will these manufacturers provide employment for more than a handful of key personnel while they wait for steel mills, for example, to convert from heavy boiler plates required for tanks and ships to the lighter sheets required by most civilian industry?

In addition, there will be the problem of procuring thousands of small

parts, from nuts and bolts to finished motors, upon which nearly every metal-working factory depends. Before these can be available, the suppliers must convert their own plants, procure their own raw material and semi-finished parts. Obviously, Jones & Smith cannot immediately start turning out waffle irons and electric heaters, nor can thousands of other manufacturers reappear overnight with their old-time civilian lines.

This is certain to produce a crisis which may result in much temporary unemployment. This very unemployment, or fear of it, may seriously shrink what otherwise would be a sizeable consumer demand. By the time Jones & Smith get their goods to their dealers, therefore, they may find the market considerably smaller than they had anticipated.

They may find, too, that the supply situation is startlingly different than before the war. The fact that they have ample working capital and bank credit

may have become of secondary importance. When peace dawns they may find that they must make their new civilian purchases of raw material and parts with something more than money alone—something of which they may have no more, even less, than their less wealthy fellow manufacturers.

Privilege to buy

THIS may be called "permission to purchase," or "buying privilege," or "priority." Today, as "priority," it is obtainable and useable only at the will of the Government. Without it, dollars are of no value. For all practical purposes it amounts to companion money.

If current political philosophy continues to develop, Jones & Smith may have to delay conversion until they can procure this new medium of exchange from Washington. Even though Jones & Smith may have staunch friends among the suppliers of raw material and semi-finished parts, these friends may have to say:

"We are sorry but we cannot even accept your order until we get a green light from the proper governmental agency."

It is possible that many manufacturers will have to delay reconversion until they can procure from the Government some new "privilege to purchase."

It is by no means academic to assert that we already may have entered upon a new era of national economy in which mere monetary wealth may cease to be an all-powerful factor in satisfying one's desires. We may be well along the road to a social condition in which the rich no longer are richer in buying power than their less fortunate brothers. Without this thing now called "Priorities," money today buys little in industry. It is only a short step further into a social order in which government controls the purchases of all citizens, rich and poor.

Another problem which will confront Jones & Smith soon after "P Day" may be that of dealing with an entirely different type of men. Jim Jones and Bill Smith were raised in an atmosphere of self-reliance. To accept charity was a disgrace. If a man had hard luck he was expected to pull himself out of the hole with only a moderate amount of help from his friends.

The past ten or 15 years have seen this psychology almost completely reversed. Men now only in middle age are inclined to consider that, if things do

not go well, the Government will care for them with only a minor loss to their self-respect. If hundreds of thousands of men are thrown out of employment, even only temporarily, in the transition back to peace-time economy, it is possible that many may prefer to seek relief from government agencies rather than from Jones & Smith.

Added to any unemployment caused by the cessation of war production will be the release from military service of several million soldiers, all in the prime of life and all eager to get back into civilian activities. These men will be seasoned, tough, and accustomed to being led.

They may be extremely impatient with a social system which has provided Jones & Smith's employees with fat pay checks during their absence unless there is an opportunity for them when they come home. Some smart advocates of "a new social order" are counting on this for the upheaval

government function. The problem of dealing with millions of idle workmen is likely to absorb much of Government's attention after its energy and huge personnel are released from war activities.

Planning for peace is a challenge to our local and national leaders, a challenge particularly to business and industrial men. Unquestionably there will be severe competition for such leadership among Government, Labor, Agriculture and Business.

At this moment Government looks upon the job as logically its prerogative. Business, once undisputed leader of our commercial life, has occupied the dog house so long that it has developed an almost pitiable inferiority complex.

If it is to continue to provide the bank deposits with which to meet Labor's pay rolls and Government's taxes, Business must overcome this defeatist attitude and once more assume its rightful position as a respected and influential member of the Business-Labor-Government triumvirate. It can do that if it approaches the national council table with its plans sufficiently well rounded to carry unquestioned weight with both public and Government.

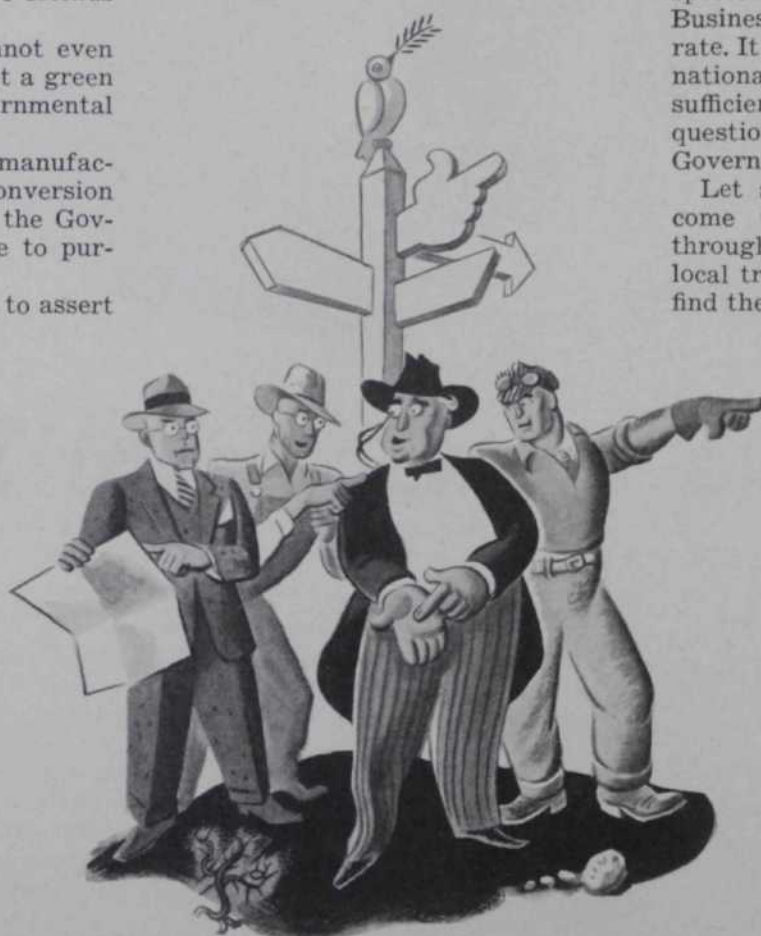
Let some definite plans for peace come up from the "grass roots" through local chambers of commerce, local trade associations, and others to find their way into the national organizations as foundations for national policy, and they will form a powerful factor no politician or government agency will attempt to minimize.

Local plans

IF EVERY locality carefully analyzes its own transition problems and evolves its own recommendations for handling them, the sum-total of all these ideas should produce the foundation for an all-inclusive and workable plan for peace which the national associations can effectively present.

Southern California, because of its tremendous increase in factory employment, is an outstanding example of the need for a workable plan to be put into effect instantly when "P Day" comes. Such a plan must embrace practically every industry in the area because it will involve a mass movement of men from war plants to civilian factories and other industries.

Close to 500,000 men and women probably will be building aircraft or aircraft parts in Southern California
(Continued on page 80)

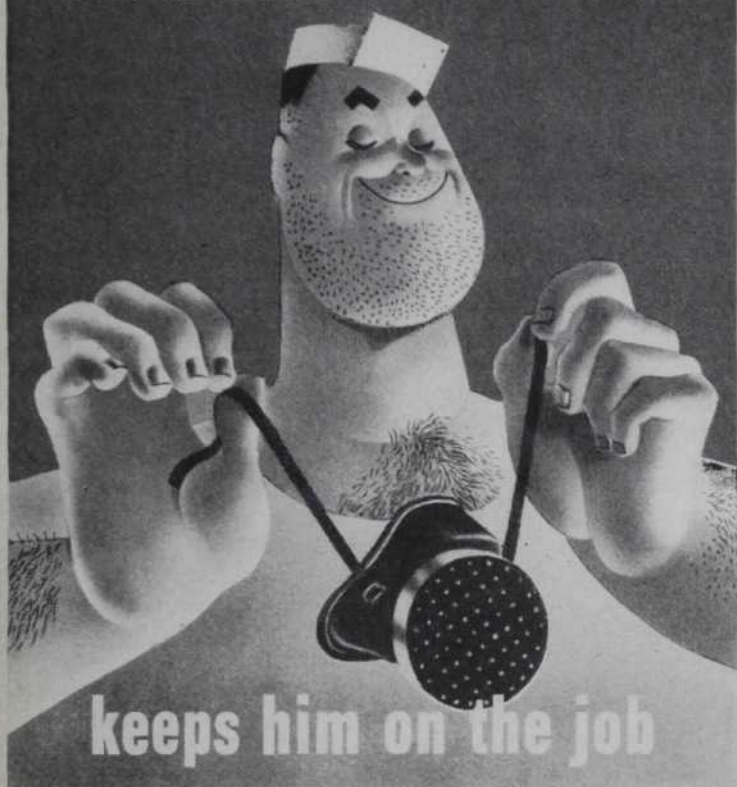


There will be competition between Government, Labor, Agriculture and Business

which will, they hope, boost them to positions of greater personal power.

It is becoming more and more obvious to students of political trends that the factors of material and men offer what appears to be a valid argument for continuing the Government's tight grip on business and industry. Deciding who first gets raw material for civilian production can easily become a

His mask



keeps him on the job

FIRST AID



Safety first

keeps him on the job

Safety helps for small plants are a part of the war effort

Civilian Health is a Weapon

By CARL BROWN

ACCIDENTS and illness snatched 484,059,000 work days away from the nation's war-pressed industrial output in the year just ended.

The effect on production was the same as though enemy bombers had knocked out for the entire year 1,861 industrial plants, each employing 1,000 men and women.

At 60 cents an hour, this represented \$2,323,483,200 lost from pay envelopes.

The manpower loss equalled the services of 1,800,000 persons from the year's start to its end.

That loss is likely to grow rather than diminish in 1943, chiefly because the goal of a total labor force 13,000,000 greater than normal probably will be achieved this year.

That tremendously expanded band of producers will include from 4,000,000 to 5,000,000 women inexperienced in the discipline of group production, older men who have lost their work habits, and youngsters who have yet to learn

IF YOU CAN see it, step on it or smell it, it's a health hazard whether it's in a plant or a home. A worker injured at play is out of production just as if he was hurt on the job

how to work efficiently and steadily.

Doctors will be fewer. Trained industrial safety personnel will be thinly spread. New processes are likely to bring new health problems, and substitutes might bring still more.

"I could walk into a pottery plant and say: 'Your dust concentration is too high, you should have a ventilating system,'" said Vincent P. Ahearn, secretary of the Industrial Hygiene Foundation, in pointing out other war-produced industrial health problems. "But the War Production Board might say

you couldn't have the materials for a new ventilating system. Other old correctional methods are no longer available. The problem today calls for initiative.

"Industry has made a good start in reducing shop health hazards. But the job isn't done. It isn't just a medical problem. It includes the effects of fatigue, monotony, ventilation, illumination. It is a managerial and personnel problem as well as medical."

The campaign to guard employees from health and accident hazards has been waged on many fronts for years. Industry, particularly big industry, has organized staffs of medical, engineering and technical experts to carry on the fight.

The nation's new biggest industrial employer, the United States Army, has drawn heavily on these scientists to protect the 750,000 or more workers in

our munitions and armament plants.

"Industrial medicine and industrial hygiene in this country have reached a high point of efficiency," observes Lieut. Col. A. J. Lanza, chief of the Occupational Hygiene Branch of the Medical Corps. "The Army aims to provide the benefits of this progress both for soldiers and civilian employees, as well as to contribute from its own experience."

Playtime Accidents are Costly

BUT, although it may be efficient, big industry has but a small part in the overall employee health problem. Accidents on the job or industrial disease cause only ten per cent of the time employed persons lose.

The other 90 per cent results from off-the-job accidents and ordinary illness. The United States Public Health Service makes that estimate. Some of its studies show the off-the-job ratio as high as 15 to one.

This demonstrates that the whole problem is a community, rather than an exclusively industrial, responsibility. Says J. J. Bloomfield, sanitary engineer for the Public Health Service:

A good beginning has been made in providing minimum public health facilities in war areas. Further improvement must

come, in large part, through a more realistic facing of the problem by the states and communities involved.

Crowding, poor housing, lack of medical and welfare services all combine seriously to threaten health and to disrupt normal family life. Add to these the mental strain caused by war worries and the situation is not conducive to good morale and all-out production.

The disruption of community facilities, then, is one of war's many influences on industrial medicine. It is perhaps the first to be felt in the industrial physician's practice and one of the last to be recognized.

To combat the threat of contagious disease which would seriously disrupt production, the Public Health Service has sent more than 700 physicians, engineers, technicians, nurses and other professional workers into nearly 200 critical war work areas. They coordinate their efforts with those of state and local health departments.

The service also has "flying squadrons" which descend on munitions plants to check every possible point that might affect war workers' health or safety—from the air they breathe to the work they do, the clothing they do it in, the place they do it and the food they eat.

But it is toward the smaller plants and a broader general understanding

of more healthful and careful living that Dr. James G. Townsend, Public Health Service medical director, is aiming his greatest effort.

"Employed groups, just as groups gathered in school rooms, are amenable to health education," he points out. "If they can be taught to practice prevention we won't need so many doctors."

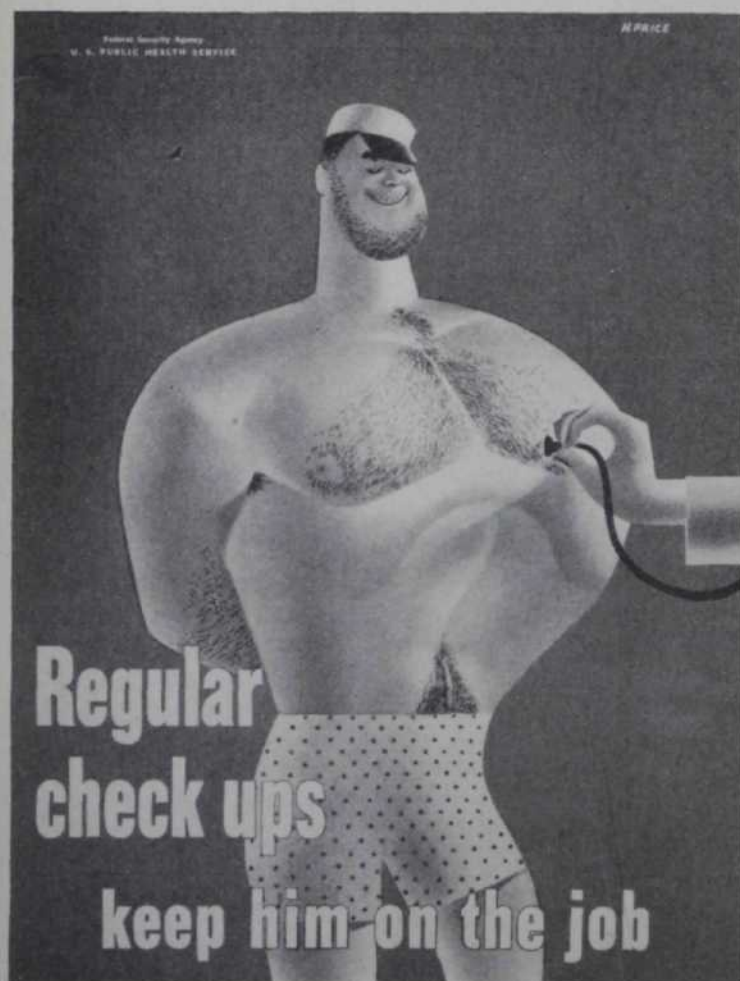
He urges that small plants which can't afford a full time physician form a pool to retain a doctor on a scheduled basis. The names of doctors not eligible for military service and trained or experienced in industrial practice may be obtained from state medical association chairmen. County medical associations also can help.

Redistribute Doctors?

UNDER present plans, the armed services will take 15,000 doctors this year. That would bring to 50,000 the total taken into the services since war was declared, leaving 80,000 for all civilian practice—a ratio of one doctor for each 1,500 persons. The pre-war national ratio was one to 1,000. Pre-war state ratios range from New York's one to 636, to Mississippi's one to 2,020.

"One to 1,500 is a very fine ratio," says Dr. Margaret Shearon of the Pro-

(Continued on page 74)



Shortage of doctors, new products, new workers, frequent lack of needed health equipment today put an unusual strain on management who must call on their ingenuity to head off health hazards

The DOLLAR that works three shifts

First shift

IT'S A SECURITY DOLLAR

—buying protection for you and your family in an unsettled world.

Second shift

IT'S A WAR DOLLAR

—helping, through War Bonds and other investments, to finance war production.

Third shift

IT'S AN ANTI-INFLATION DOLLAR

—a stabilizing force because it is not competing for consumer goods.

It's Your Life Insurance Dollar!

BUY WAR SAVINGS STAMPS—FROM ANY METROPOLITAN AGENT, OR AT ANY METROPOLITAN OFFICE

Metropolitan Life Insurance Company (A MUTUAL COMPANY)

Frederick H. Ecker, *Chairman of the Board*

Leroy A. Lincoln, *President*

1 Madison Avenue, New York, N. Y.



Washington and Your Business



Might be a photo finish

THIS corner is not being moved by a chivalrous impulse. It had as lief kick Congress when it is down as to abuse any other helpless creature. And Congress has been down so much in the past few years that it must carry a permanent taste of resin in its mouth. If this department were to make book, however, it would wager that Congress is coming up. The result of the race in the next two years might be something like this:

Congress	Win
Executive and supreme court,	
stable entry, coupled in the	Place
betting	Show
Bureaucrats	

The returned members and the newcomers in the Seventy-eighth Congress seem to have a new sense of congressional dignity, if observers are not deceived. That new sense was born in the grass back home. Representative Walter M. Pierce (D), of Oregon, 82 years old, 30 years in office, ten years in Congress, 57 years in public life, stated in cynical terms why he was defeated for reelection:

"A congressman has to have a strong standing at home or he cannot come back."

Near the bottom of the barrel

LEON HENDERSON told the War Congress of American Industry that "the bottom of the barrel of public patience has not yet been reached." If he had studied the *Congressional Record* for December, 1942, he might have observed that American patience is divided into two parts:

"We are willing to undergo any hardship to win the war," was the tenor of the month's debates. "We have accepted bureaucratic control because it seemed to be necessary. But the people are reacting against the arrogance of the bureaucrats and their inefficiency."

Mr. Sumners of Texas is hopeful but not certain that Congress may check the bureaucrats.

"We may have waited until it is too late. The horse is about out of the stable when we come to lock the door."

Signs of the times

FOR eight years Congress ran second to the executive. Then;

"Just when it looked as though the people were completely doped by borrowed money and were ready for wholesale regimentation," said Mr. Sumners, "the public

attitude was changed. God Almighty has intended that people shall be free to run their own business and be the masters of their own Government."

Hatton Sumners is a Texas Democrat, once a judge, chairman of the important Finance Committee, and held in high esteem on both sides of the center aisle. By unanimous consent he was given 40 minutes in which to address the House. That is an unusual gift of time.

Did we plan it that way?

MR. HENDERSON has never been a candidate for office. Every man in Congress has been through that narrow street. The December *Record* contains almost numberless comments on the extraordinary watchfulness of Washington the people back home are showing.

"They know what is going on," said more than one member. Emil Hurja is a professional analyst of political statistics. He can show by the voting returns that this examination of the acts and motives of the national Government in both the executive and legislative departments began as far back as 1933. Mr. Pierce of Oregon commented on the offensive attitude of some of the bureaucrats:

"What can be expected when one of the closest advisers of the President gives out a release from the White House in which he is reported to have said that it does not matter how the people vote or whether they vote at all."

He added that experienced legislators have told him that legislation cannot be put through Congress without the consent of the bureaus. "This is not always the case." No one took issue with this charge. He felt that a practical veto of legislation by appointed office-holders is contrary to the American plan of government.

Battle with the bureaus

THE issue was clearly defined during December. Again quoting Mr. Sumners:

"What we are complaining about is that our bureaucratic government—it is not absolute but it is just about—we are complaining that bureaucracy is acting now according to the nature of a bureaucracy. It is doing to the people as it is the nature of a bureaucracy to act toward a people whom it is governing."

Mr. Cox (D), of Georgia observed that what the gentleman was complaining about is simply a mild indication of what we may expect if Congress does not take a stand to reestablish itself. Mr. Sumners replied:

"It is my judgment that, for the first time in 25 years, the American people are going to assume the responsibility of leadership."

The 78th has a hard job

THE incoming Congress is in part a product of that feeling against the bureaucracies which was manifested in the December colloquies on the floor. It was admitted that the resumption of its constitutional powers will be difficult.

"These powers, which should never have been delegated and which have been shamefully and criminally abused through the guise of administrative law," said Mr. Cox. They were given away by a majority vote, but a two-thirds vote will be required to overturn a veto. The powers of the bureaus will be massed in defense of their position. There are about 2,700,000 civilian employees in the government employ and more coming. Representative Hoffman (R) of Michigan addressed Mr. Sumners: "The distinguished gentleman from Texas said there was a feeling 'akin to revolution' in his district. I ask the gentleman from Texas if I have quoted him right?"

"Something like that."

The story of Mr. Barden's boots

RUNNING through the month's discussion of bureaucracy were many illustrative anecdotes. Representative Barden, Democrat, of North Carolina, contributed one:

"I saw a farmer—an honest, horny handed, hard working farmer—ask for a permit in a rationing office. They told him he could not get it; that they were closed for the day; it was then 1 o'clock. The farmer said:

"This is the third time I have been after that permit to buy a pair of boots to use in cleaning out the ditches on my farm."

"Still he was refused. I said to him: 'Mr. So-and-So, maybe I can help you.' He said:

"I can't believe my Government wants to treat me this way."

"I said to him: 'You come back.' I walked into the rationing office and said: 'You give me a permit' and they gave me three. That farmer looked at me and I honestly believe he was madder than he was before. He said:

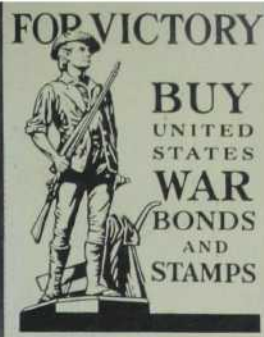
"Now, ain't that a damned shame?" Mr. Barden agreed with him.

It never happened here before

THROUGHOUT this month's intermittent consideration of bureaucratic ineptitudes or worse the somber threat of hunger in 1943 was threaded. Not one man protested against privations which might come as a result of the war. There was no objection to sending food and munitions to our allies. But from every quarter of the United States, as represented in Congress, came angry complaints against sacrifices forced on them by a fumbling, incompetent bureaucracy. If any congressman in December dodged congressional responsibility the fact does not appear in the *Record*.



Said Mr. Voorhis of California, with no demur from the House: "Every single member of Congress has a duty to point





FLAMES THAT CUT TIME!

TODAY, ships are needed as never before. And today, ships are being built as never before... and built faster, stronger, and with less steel... thanks to welding!

But before welding can take place, steel plates have to have their edges beveled and squared-up so that, when butted together, they look like this:  or like this: 


In the past, preparing plates in this manner was done by heavy machine tools. Cutting was slow and costly. Each plate had to be handled many times. Plate cutting on this basis could hardly keep pace with welding today.

Now, oxy-acetylene flames...cutting in different planes simultaneously...prepare the edges of steel plates of any commercial thickness at one pass...in a fraction of the time required by mechanical methods!

This Linde flame-planing method is as simple as ABC. It is economical...and easy to use. It cuts plates so smoothly and accurately that *no machining is necessary!* And it uses materials which can be produced in abundance.

On-the-job power requirements for flame-shaping are negligible...for the reaction of the cutting oxygen jet with the hot steel does all the work...and only fractional horsepower is required to move the cutting nozzles along the line of cut.

In conjunction with "Unionmelt" Welding... an amazing

electrical welding process that unites plates of any commercial thickness faster than any similarly applicable method... like this ... the Linde method of plate-edge preparation is working miracles in speeding up shipbuilding.

These two methods are also helping to break production records in other fields. Great pressure vessels... locomotive boilers... huge pipes... heavy chemical tanks... combat tanks... artillery mounts... and other vital equipment are being turned out faster because of them.

Linde research, intensified today, is constantly solving new problems in flame-cutting, flame-fabricating, and flame-conditioning of metals for war production.

The important developments in flame-cutting—and other processes and methods used in the production, fabrication and treating of metals—which have been made by The Linde Air Products Company were facilitated by collaboration with Union Carbide and Carbon Research Laboratories, Inc., and by the metallurgical experience of Electro Metallurgical Company and Haynes Stellite Company—all Units of Union Carbide and Carbon Corporation.

THE LINDE AIR PRODUCTS COMPANY
Unit of Union Carbide and Carbon Corporation



General Offices: New York, N. Y.

Offices in Principal Cities



One of a series illustrating Cyanamid's many activities.

Right in Our Own Backyard!

Sure, there's a pot of gold at the end of the rainbow. And just over the horizon are "acres of diamonds." But riches in our own backyard? Yes, and in them American self-sufficiency in strategic metals.

Called upon for unprecedented quantities of tin, iron, zinc, copper, magnesium and other metals, and deprived of former foreign sources of ore, our mining industry is adopting new ways to treat greatly increased tonnages of low-grade ores as well as sub-ores and waste products untouched in peacetime.

Most practical, immediate results in this direction are being obtained by Heavy-Media Separation, modern adaptation of the sink-float process. Long sought by metallurgists, it is a simple, workable method whereby minerals are

separated from rock in a medium consisting of finely ground, specially-selected solids and water. The process functions mechanically and depends only on the differences between the specific gravity of the valueless rock, the valuable minerals, and the separating medium.

With the help of Cyanamid's engineers and metallurgists, substantial tonnages of strategic minerals are already being treated by this process and new plants are under construction. It is a step that takes us nearer than we have ever been to the El Dorado of self-sufficiency in essential metal production.

Finding riches "right in our own backyard" is no new thing

for American Cyanamid. Indeed, this down-to-earth accomplishment is typical of the many contributions Cyanamid is making to industrial progress through chemical, metallurgical and physical research.



**American
Cyanamid Company**

30 ROCKEFELLER PLAZA, NEW YORK, N. Y.

MOLDING THE FUTURE THROUGH CHEMISTRY

out what is wrong and to seek to correct it with every means at our command."

A score of members observed that mismanagement by bureaucracy is injuring the dairying and agricultural industries. Already there are shortages in foods.

Maybe this is why France fell

A MEMBER of the American Club of Paris said that one reason why France fell was that the French people were sick of their bureaucrats.

"They had lost their loyalty to a Government which was personified to them by many insolent clerks and long standing in line to get some needless permit.

"I saw with my own eyes," continued Mr. Barden, "people standing in line 50 yards long to get some blank that any

man with an ounce of brains could have made available to them" without their having to drive from one to 40 miles for it. How many times have they been there?

They have been there for every conceivable thing. One man told me he had used up two weeks' gasoline allotment to get enough kerosene to have a light in his home. I can see nothing except that somebody down in the O.P.A. wants to get the people in the habit of crawling to them on hands and knees asking for something, if it is nothing but a sheet of paper."

Some straws in the wind

A HASTY run-through reveals the extraordinary manner in which complaints that the executive end has been incompetent have increased. Senator Byrd's crusade for a reduction in unneeded personnel and unnecessary costs continues to be first page news. It is reasonably certain that an effort will be made to reduce governmental accounting to some kind of order so the nation will be able to see at a glance what the cash and carry over situation may be. Texas warehousemen came to Washington to urge common sense in expenditures:

"The Government is paying us more money for warehouses in which to store turned-in tires than we ever thought possible," they reported, "but lots of the tires are not worth one-third of the cost of transportation alone. That's dumb business."

Bilbo filibustered the poll tax bill to death. Yet he is far from a strong man in the Senate. The Senate feared another invasion of the rights of the states. There is no indication that either House wishes to interfere with the conduct of the war by the executive but the Bureaus will persist in such idiocies as the flood of questionnaires at their peril. The Budget Bureau is sure to get an overhauling.

"The Budget no longer tries to shut off expenditures but only to channel them," said one senator.

Bring your midwife with you

THE nature of a bureaucracy—even of a well-meaning bureaucracy—to function as a bureaucracy is illustrated by an incident in the present history of the Veterans' Administration. This bureau has

always been well managed by army officers who have no interest in upsetting the American theory of government or way of life or in promoting any political fortune. It has been operating for more than 20 years. But—

"You must produce proof of identity," the bureau ordered an 86 year old woman who lost a son at Pearl Harbor, "before your insurance claim can be paid."

The V.A. honestly wishes to pay that claim at the earliest moment. The poor old woman needs the money. But, in 20 years, bureaucratic rules have congested operations. The 86 year old woman must prove her identity by (a) a birth certificate or (b) a church baptismal record or (c) an affidavit from the physician who was present at her birth or (d) the midwife or (e) affidavits from two persons who were present when she was born 86 years ago. The bureau forgot that a birth is usually considered a rather exclusive affair.

There are other rules, but these give the general idea.

One fear has been lifted

SOME congressmen who have been in personal touch with their constituents report that the labor bugaboo no longer has power to frighten. If there ever were a solid labor vote—and some of them doubt that—it has been eaten into by labor racketeering as reported in the papers, and by the exactions of labor bosses at the war production plants:

"One man who has been made to pay out hard money for the privilege of working for his Government in time of war can turn more votes than you would think possible," some congressmen report.

There is at least a prospect that labor legislation now on the books will be reconsidered. Congressmen no longer fear reprisals from a pro-professional-labor administration. Fact is that the power of the pressure groups was to some extent lessened by the November election.

It was hard to find evidence that any one of them produced the goods in the form of votes.

Rigid governmental future

THE Budget Bureau and the Civil Service Commission are working in harmony on a new plan to staff the permanent offices of the Government with men trained to do things in a single way and to think along a single line:

"As fast as each class of clerks is graduated, its members are made instructors to train other classes."

The end result is that the Government's operations will be as standardized along a new political order as some

observers allege the courts already are being standardized. Future spending by the Government could be simplified. The money taxed in could be spent out without being subjected to any control except the whims of the departmental heads. Congress set up a partial block against this by refusing to subject the General Ac-

counting Office to executive control. It remains an agent of the legislative branch.

Full support for war measures

EVERY dollar asked for the war needs will be granted in the belief of the men in both Houses who will control legislation. But hidden jokers will be looked for. The House threw out the one new clause in the Second War Powers bill which gave the President the right to suspend the operation of the immigration controls. These leaders feel that it was a strained construction of the laws which permitted

the President to put through the \$25,000 salary limitation after Congress had definitely refused to accept it. Because courts in passing on the constitutionality of legislation are likely

to be guided in some part by the debates on the floor, the *Record* was amended by the elimination of a statement of an administration lawyer which appeared as a part of a speech by Senator Preston Brown, although he did not in fact deliver it. Scrutiny of the whole body of war legislation and the actions taken under the various laws is being undertaken as a part of the unconcerted and yet formidable determination to restore to Congress the dignity which it impaired by its careless acquiescence in the demands of the executive.

The Walters Bill reappears

OBSERVERS believe the Walters bill will almost certainly be enacted in this session. It was once passed by both Houses and vetoed by President Roosevelt on the general ground that it would impair the practical operations of the Government. In effect it subjects the various administrative agencies to the control of the courts:

"We have too many little presidents," said one man, "each running his part of the affairs of the nation to suit himself."

The feeling that something must be done is strengthened by every unwise bureaucratic act. Rationing is accepted without protest by Congress and the nation, but when the O.P.A. forbade farm wives to roast their own coffee, Mr. Henderson bought himself a load of trouble.

Might be hard on the cow

"I ASKED the Department of Agriculture for permission for the co-ops to get trucks so they could collect the milk from the farmers and bring it in and utilize it. After several weeks' delay I insisted on an answer and a man named Wickshire down there advised me to tell the farmers to hold the milk and I asked him whether the farmer was to hold the milk or the cow. He said that I was foolish and that was all the satisfaction I could get."

Mr. Johnson of Illinois reported Secretary of Agriculture and Food Czar Wickard's statement to the House committee: "You cannot do away with subsidies," said he. "If you did, the Government would lose control of the farms of America." Subsidies are bureaus.

—HERBERT COREY



Beauty Kits for Bonuses

By MARGUERITE F. LaBELLE
and MARIE HEUER

THE HAND that rocks the cradle can also run a drill press but management must make some changes if it is to do the job efficiently

A MACHINE tool operator was showing other admiring workers a bonus which the company had just presented as a reward for good work.

The bonus was a beauty kit.

That doesn't mean that the American workman is growing soft. The American workman had nothing to do with this incident. The machine tool operator, like her fellow workers, was a woman and the scene was the Republic Drill and Tool Company in Chicago where the woman who works is neither a war baby nor a glamorous crusader for a new era of civilization.

According to Company President E. A. Reinhardt, she's just a hard-working gal with a daily stint of work to do and a ready hand on pay day.

Republic has accepted the woman worker, not only for the duration but forever. That seems to indicate that both girls and management are pleased with the arrangement. The reasons for this mutual satisfaction may serve as guide posts for other companies which, as they employ women either from necessity or choice, may learn about women from Republic.

In the first place, although the Republic plant was originally designed for the employment of women workers, a drafting job which took into consideration additional washroom facilities and special arrangements for more room in crowded departments, there are some jobs for which women are un-



GEORGE LOHR

Women are naturally more sensitive to home problems than men and today many of them have been thrown into a new way of life

sued. Women aren't as strong as men, and they do not stand heat as well. Also, all women don't make good factory workers.

"Frequently," says Miss Dorothy Koehler, Republic's employment manager, "they leave at the end of the first day. But, some types of girls—those who don't like the idea of spending a large part of their pay on clothes, for instance—like to work here."

She remembers one girl who showed up at the employment office recently. She was quick, intelligent and had a pilot's license. Within three days she was setting up machines for the other girls and running her own milling machine like an old hand.

All girls aren't like that. One young domestic worker used to call at the employment office every day.

"This is my last day," she told every one who would listen. "This is the end."

But next morning she was always back. Gradually her visits of complaint became more infrequent. Now she is one of Republic's best workers.

Part of the trick of keeping square pegs out of round holes is to ask the proper questions in the beginning. Another large part hinges on the "counselor system," directed at Republic by Dr. Bert Beverly. Women are naturally more sensitive to home problems than men workers and, in addition, today many have been thrown unexpectedly into a new way of life. With a husband in the armed forces and small children at home, a woman finds the responsibility of becoming active head of the house a sufficient nervous strain in itself.

(Continued on page 78)

The train with no caboose

YOU HEAR its deep, friendly voice echoing through the mountains and the valleys of the Southland. You hear its powerful engine pounding through many a bustling city. You hear its eager clickety-clack as it weaves across fertile farmlands and greening pastures.

It's a freight train that never ends... with no last car... no caboose. It's the combined war-time freight haul of the Southern Railway System.

Day and night, this train hauls ore from the mines, oil from the wells, food from the fields and lumber from the forests. Day and night, it rushes bread and beef and bullets to America's fighting men. Day and night, it feeds American industry and sustains a nation grimly at work.

And when the war is over, this train with no caboose will still be humming over the rails of the Southern, proudly bearing the hard-won fruits of Victory.

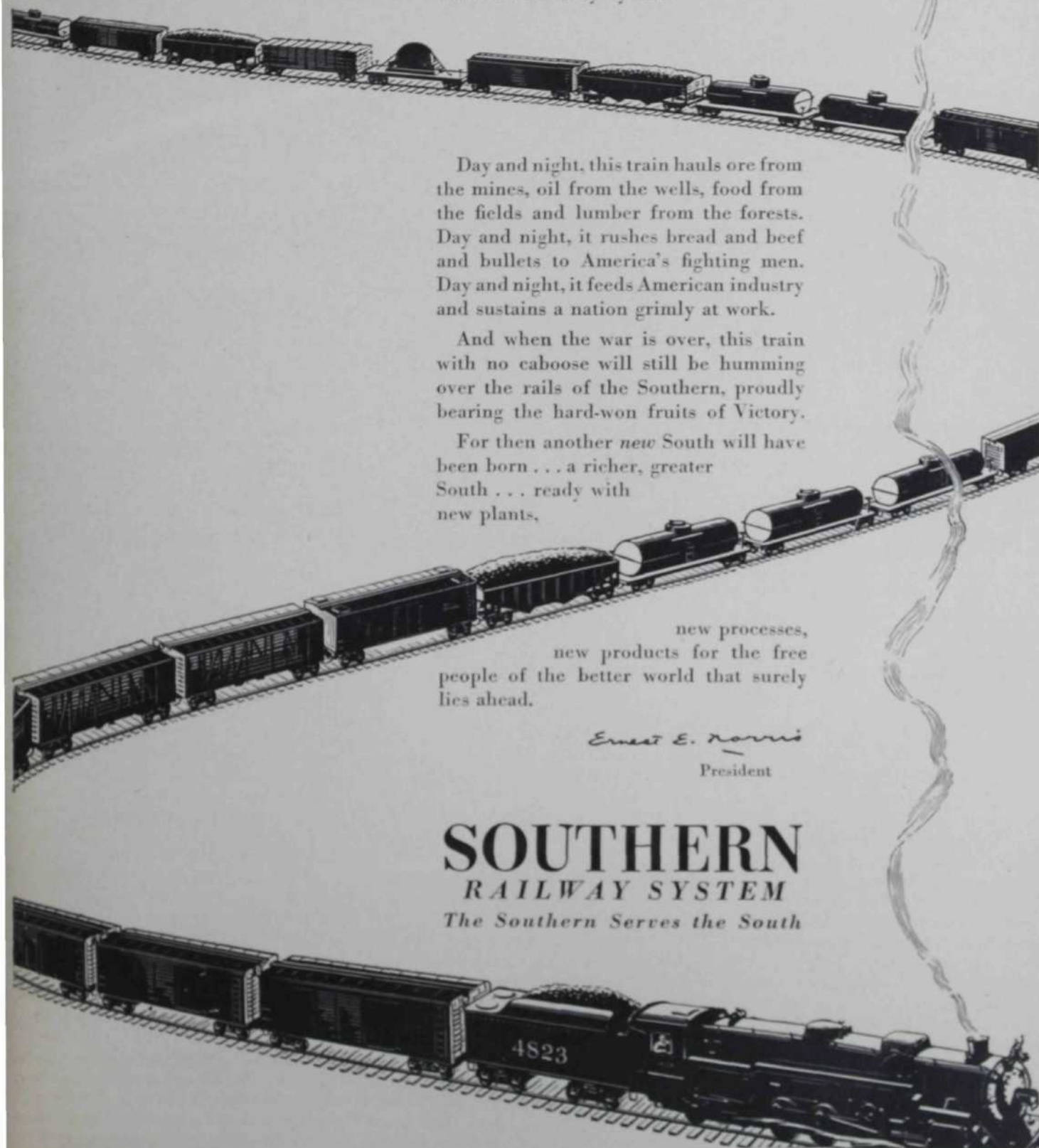
For then another *new* South will have been born... a richer, greater South... ready with new plants,

new processes,
new products for the free
people of the better world that surely
lies ahead.

Ernest E. Harris
President

SOUTHERN RAILWAY SYSTEM

The Southern Serves the South





"Economic pressures make business men do any number of things."

GETTING a few minutes with Brunson MacChesney, assistant general counsel in charge of enforcement for the Office of Price Administration, is like trying to interview Gen. Dwight D. Eisenhower in the midst of a landing operation—it *can* be done, but the man who does it feels that he's uselessly worrying a very busy man.

After arriving at Room 36-A in Temporary Building D, which looks mighty permanent, you find Mr. MacChesney's attractive brunette secretary surrounded by callers, most of whom seem to have important business that just can't wait—but does. She alternately gives the visitors an impersonal

smile, answers the telephone to ask, "Can I give you a notation on that?" and answers it again to ask, "Is this Dallas—or St. Louis—or San Francisco?"

Once inside his very-plainly furnished office with Mr. MacChesney, you still don't feel that you have any business there, because the telephone keeps ringing and she keeps opening the door, sticking her brunette head in, and saying, "Dallas wants to know if that Stoopnagle case is okay?" or some other important question. As every taxpayer will be glad to know, Mr. MacChesney doesn't seem to want you to take much time anyway, he's too busy

O. P. A.'s Chief of Police

By LARSTON D. FARRAR

**BRUNSON MacChesney has
12 rationing programs, 230
price regulations to enforce**

trying to do his job for Uncle Sam.

Before you are well-seated, you learn by Mr. MacChesney's own words that he doesn't "go in for publicity." While a lot of this is just plain modesty, some may be explained by the fact that Mr. MacChesney can't see why he should be of interest to the public. Besides, he's not running for any office and never expects to.

While he's talking to Nashville, you think: "This brown-haired, grey-eyed, tall, young man couldn't be so bad, although he *has* a tough job. No secret wires around here, no villainous agents reporting on their snoopings, no children reporting their parents for drinking too much coffee." Just a lot of neat papers that remind you of those you used to see when you covered the Grand Jury back home.

Not a police chief

BETWEEN interruptions, you learn that he is indeed a thorough-going, full-blooded, deep-dyed American, even though he is the "police chief" of the O.P.A. which designation, incidentally, he doesn't like worth a damn. He doesn't necessarily think it's a misnomer. He just doesn't like it. He never wanted to be a policeman when he was growing up, anyway.

You learn quickly (if you ask quickly) that Mr. MacChesney is 33 (born under Taurus, The Bull, in the signs of the Zodiac), smokes ready-rolled cigarettes of a well advertised brand,

(Continued on page 58)



Cargo planes may come before Peace

*(Why not Plan Now
for Air Freight?)*

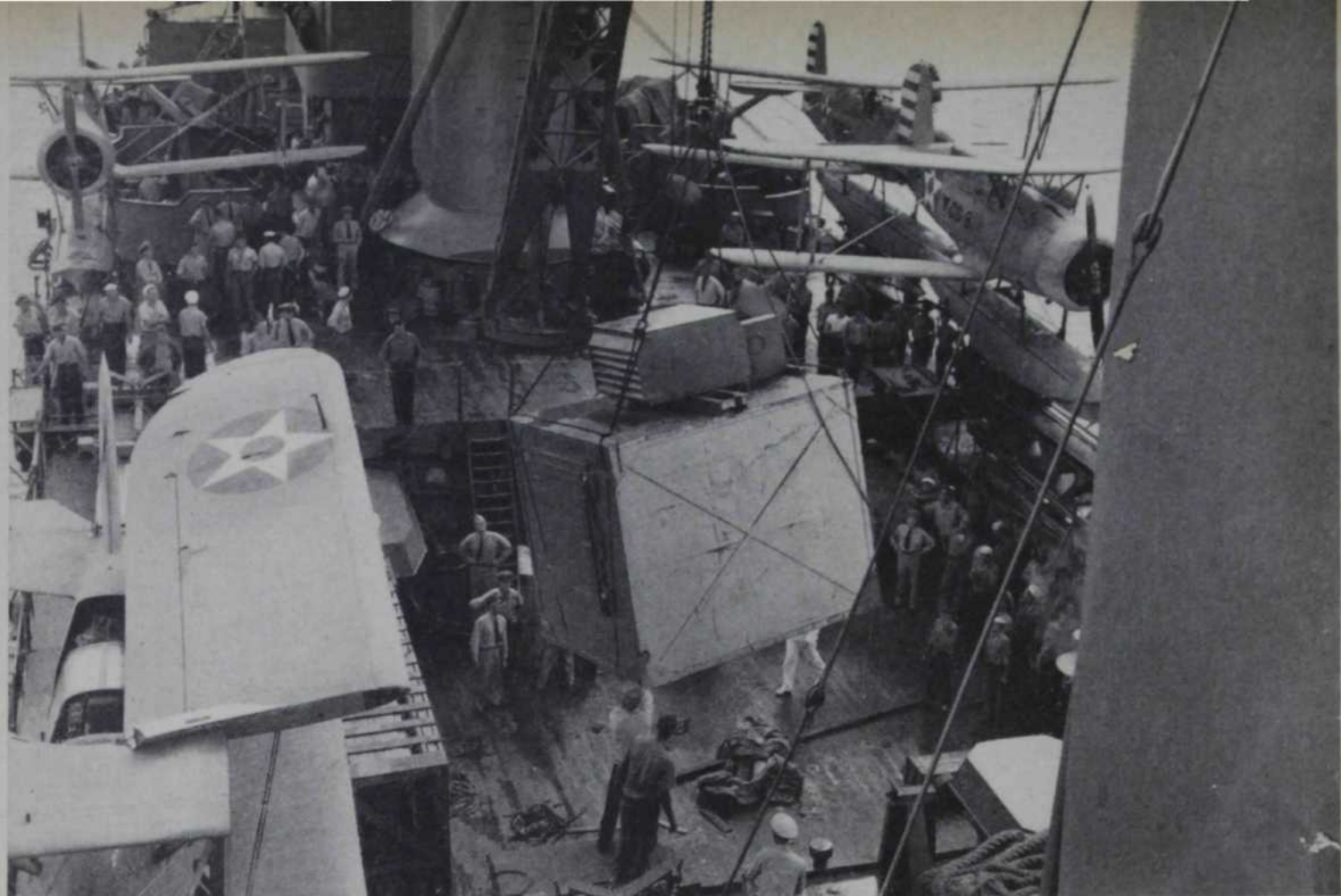
POLITICAL boundaries in the post-war world may be shadowy and indistinct. But the fact that there will be overseas Air Freight running into millions of pounds per year, stands out sharp and clear.

This development may radically change the whole basis of some businesses. It cannot help but change the business thinking of exporters and importers. And it is not too soon today to begin making post-war plans accordingly.

If cargo clippers should come before peace (and they may), wouldn't you like to know the profit possibilities that will open up for your products the day peace comes?

Because Pan American pioneered both Air Express and overseas Air Freight we have some facts and figures that should interest you. Pan American World Airways System, New York.

Wings over the World
PAN AMERICAN CLIPPERS



U. S. MARINE CORPS

Stevedores got the idea, learned new ways to load ships so that what was first needed could be first taken off, so that repair parts were at hand if they were needed

Hail to the Split Second

By HERBERT COREY

WHAT the Army calls "logistics" is actually only the application of American assembly line methods to the needs of moving men and arms

THIS is a brief tribute to the American split second. It moved an army to Africa. It sent a fleet to the far Pacific. Battleships, cruisers, destroyers, transports, tankers, Flying Fortresses, P. T. boats, submarines. Guadalcanal and the Solomons live on it. Without aid of the split second, Gen. Douglas MacArthur and his men in New Guinea and Australia would be merely an army a long way from home. It gave the Son of Heaven a thorough licking. Then it repeated. It pulled the war in Europe end for end. It upset Hitler's calculations in front of Stalingrad. Mussolini stumbled toward the medicine closet. Church bells rang in England for the first time in two years.

Professors have another name for it. That name may be used in this piece

and it may not be. The war, the reform plans, the questionnaires, the statesmen and the bleeding hearts have been prolific of words that have Greek roots and Latin branches and little sprigs of Chaldean, Gaelic and Punic languages. Most of us do not know what they mean until we have looked them up.

We all know the split second. It made the American assembly line.

Other peoples have good mechanics and grand ideas. They put the two together and make fine machines. Americans made the best machines in the world from the day the first American

gunsmith bored out the first American rifle. Americans added the split second to capacity and ingenuity and American industry became tops.

Admiral Robert L. Ghormley spoke of the importance of the split second. He held a command in the Pacific during that period of frantic preparation that followed the sneak attack at Pearl Harbor. Ship after ship laden with men and supplies sailed into so-called ports. In some there were no docks. No longshoremen except head-hunters and ex-cannibals. All had been foreseen. The cargoes were unloaded on the principle that the things first needed must come first.

That is the whole plan of the assembly line. No lost motion. No lost time. No interference. One smooth, rhythmic progression.

Ever been to ACCRA...

AFRICA?



YOU TAKE THE CLIPPER, you know. Accra is only a pin-point on the coast of darkest Africa... yet you'll find electric lights, hot-and-cold running water, air conditioning, electric stoves and a laundry!

For all these... Pan American Airways, which developed its service in cooperation with the Air Transport Command, relies on giant, *water-cooled* Diesel generators.

But the African water used to cool those Diesels hardens their arteries. A scale of magnesium and calcium collects on the pipes. Clogs them.

To combat this paralyzing scale...engineers have had to install zeolite water softeners. These soak up the calcium and magnesium until even the zeolite can take no more.

And that's where *International* comes to the res-

cue. Puts a simple substance to work...a substance so familiar to American industry...*salt!*

For *salt* has a fatal attraction for calcium and magnesium, washes them away... keeps the pipes free and clear. The pipes that keep the Diesels going!

Regenerating zeolite water softeners is only a small phase of the vital chores that *salt* performs for industry. The engineers running production today... in glass-making, tanning and dyeing, in meat-packing and canning... will tell you how they rely on salt or salt processes by International.

Their experience can give your production lines a lift. Consult with International Salt Co., Inc., Scranton, Pa. Rock salt, evaporated salt, lixate brine, salt tablets, Sterling table salt—for industry, agriculture, the home.

Five hundred cargo hulls guarded by 350 naval ships carried the American army to Africa. In the 500 burden-bearers were 700,000 different items for war use. Not 700,000 articles, mind you, but 700,000 items. The Army's Service of Supply could tell, if it had time, how many million articles for the 700,000 items were sent overseas. There were tanks, trucks, combat planes, interceptors, Flying Fortresses, water purifiers, oil cleaners, pumps, needles and thread, buttons, rifles, shells, cartridges, bandages, medicines, blankets, shorts, shirts, printing presses, traffic signs, typewriters. Each article was composed of items. Generators, spark-plugs, ribbons, extra shoes, shoemaker kits, laundries and delousers.

Each of the 700,000 items must have spare parts. There must be machine shops in which to install the spare parts. A truck without a generator is only fit to cast in the ditch. A Garand rifle costs \$80. A Garand rifle without a firing pin is scrap. A firing pin in the United States costs a quarter.

The 700,000 items, multiplied incredibly, were provided in advance. Every American community had a part in making or providing or going without. Assembly lines clicked in innumerable cities, towns and fields. All to the tune of the split second. This part was easy enough. Only the magnitude was appalling but even that did not slow the work. American industry is accustomed

to handling big jobs. Jim and Joe and Pat and Stanislaus stood elbow to elbow in mile long regiments turning screws and slipping parts into place.

When all the manufacturing had been completed, the job of handling, loading and shipping on a split second schedule began. Donald Nelson once said that the infinite variety of American war-manufacturing operations staggered the imagination. When the handling began, the imagination might have been excused for slipping into the blind staggers. At the far end of the handle was the black African coast.

Curios and grayhounds

THE 500 cargo ships were of all sorts. Tramps which like eight knots an hour better than nine. Diesel engined freighters that can tear off 18 knots without a quiver. Modern hulls equipped with cranes and donkey engines that can pick up a 28 ton tank. Antiquated curios in which cargo must be stowed by hand. Seagoing splotches of rust. In them were packed thousands of men. It has been said that 140,000 men were in this initial expedition. The exact numbers have not yet been made known. These ships, slow, fast, crank, leaking, sound, trim, messy, sailed from dozens of ports. The distances to be traversed ran from 1,500 miles to 4,050 sea miles.

They were scheduled to reach a doz-

en different spots at precise moments of a certain dawn. Not all at once, but in regular order. First things first. Tanks off, then mobile guns, then jeeps, then shells, then food. Each item with its attached men. If that fleet of 500 cargo ships had clotted up off that hostile shore or milled in confusion any kind of ruin might have followed. If men and munitions had not been placed on shore in the orderly American way—split seconds counting at full value—the invasion might have fallen over its own many feet.

That superbly successful landing—it has been called the most magnificent operation of the kind in the world's military history—began away back in Chicago, Kansas City, St. Louis, Omaha, Liverpool and Glasgow. An All American team handled it.

In the dozens of ports there are only so many scores of docks. Thousands of schooled longshoremen handled the freight. It was necessary to school them specially, because army loading sometimes violates the sacred canons of the longshoreman's science. He would load a ship with an eye to stability and seaworthiness. The heavy articles like tanks would go in the lower holds. The articles would decrease in weight as the lading progressed. The deck load, if a deck load was necessary, would be made up of light little things.

The Army's loading gives some con-

(Continued on page 70)



That superbly successful landing—most magnificent operation of the kind in history—began back in Chicago, Kansas City, St. Louis, Omaha. An All American team handled it

MANAGEMENT'S

Washington

LETTER

A last minute roundup by a staff of Washington observers of government and business

THERE'S DISSENSION FROM TOP TO BOTTOM of WPB over industry concentration.

Some of the highest ranking officials directing war production hold views that differ sharply from those of the Office of Civilian Supply, WPB adjunct in charge of concentration program.

Directing the program is Joseph L. Weiner, Russian-born lawyer who replaced Leon Henderson as OCS head.

Some WPB industry divisions have been split wide open by internal disagreements over concentration.

Division is largely between men with industry and business background, and government careerists.

Some important WPB men feel that concentration program is being used as a vehicle for reform; for centralizing production along NRA line for easier government control.

The Weiner group is definitely running the show, however. Don't be surprised if a series of WPB resignations precedes actual concentration orders.

(See "A Plan to Make Industry Over" on page 25.)

► Indications are that industry's manpower problem has passed its crisis.

Farm labor shortage still is critical; will be increasingly so in 1943.

Situation in industry is being eased, however, by these major factors:

GROWING PLANT EFFICIENCY. Man-hours per unit of war products are showing sharp drops. Cause is rapidly developing "know-how." Green employees, women, transplanted workers have learned fast, sending production speeds to new highs.

CONSTRUCTION IS TAPERING OFF. The war plant has been built. 1943 construction will be half of 1942's. Nearly 1,500,000 highly skilled workers will go from construction into the general labor pool.

HOURS OF WORK WILL BE LENGTHENED. 48- or 52-hour week seems certain to become general, with or without overtime for all work in excess of 40 hours.

Effect of the release of construction workers will depend on how skillfully their talents are used.

It may be slight unless ways are found to utilize their 19 specialized trades as Henry J. Kaiser did in shipyards.

Construction craftsmen have been averaging \$75 to \$80 a week, with overtime. They will resist going into other jobs at beginners' or laborers' pay.

Trade experts say best bet is to employ them under men experienced in construction field who could draw on their special skills.

► Don't overlook the significance of Under Secretary of War Robert P. Patterson's remarks suggesting the possibility of a work week of 48 or even 52 hours.

Washington interprets them as a reflection of Army attitude. Patterson's statement followed President Roosevelt's publicly expressed opinion that the highest point of efficiency is reached at 48 hours, that more time on the job might prove injurious to output.

Members of a recent British delegation to Washington said England has discovered from experience that a 56-hour week re-

sults in greatest efficiency.

There is support within organized labor for lengthening the work week—as an emergency step for the duration only.

Here is the joker: War workers in many plants already are working 48 hours. Under present law they are paid straight rates for the first 40, time and a half for overtime.

Thus a worker getting \$1 an hour is paid \$40 for the first 40 hours and \$12 for the other eight. This produces an average hourly rate of \$1.08 plus.

War Labor Board policy is that pay must match living costs. These are going up, not down. Labor is confident that WLB would not let the workers' weekly income drop in event Congress repeals the present law requiring time and a half for all over 40 hours.

Greatest manpower irritant to the Army is feather-bedding—union engineered production schedules artificially slowed to spread work and guarantee high pay rates.

Army-authorized firing of five feather-bed specialists in one plant increased production of an urgently needed war item from 20 to 55 units per man per day.

Some workers went as high as 80 with the bans lifted. But even with such proof of the need as this in hand, the officer who approved the firings will hesitate before doing it again. Aftermath was too hot.

► Lost in the flood of war news was a speech in which Secretary of Agriculture Claude R. Wickard said we must never return to the policy of plowing under surplus crops.

He tossed overboard a basic New Deal innovation near and dear to the heart of his predecessor, Vice President Henry A. Wallace.

Agriculture experts say price ceilings and labor uncertainty will tend to limit 1943 plantings.

The foodstuffs we need most—vegetables, fruits, meats and dairy products—require the most labor. When labor runs short, farmers turn to grains and feeds, which take less of it.

► Commodity Credit Corporation is re-

hearsing for a balancing act designed to hold wheat prices both up and down.

It takes the farmer's wheat as collateral and makes loans to him at \$1.15 a bushel—to bolster the price.

Leon Henderson tossed in a monkey-wrench by freezing flour prices at a time when millers were paying farmers \$1.03 for wheat.

Now CCC wants to enable farmers to sell to millers at that level. So it is considering releasing the collateral wheat to the farmers and writing off enough of the government loan so the farmer can sell to millers for \$1.03.

► Watch for an economy race between White House and Congress.

First hint came when President Roosevelt liquidated WPA 24 hours after Senator Byrd's economy committee called WPA officials for a hearing on why WPA should continue.

Acting Deputy Administrator George Field, "too busy," asked Byrd for a delay. Next day WPA was folded by Executive order.

Senator Byrd promptly added \$337,000,-000 (this year's WPA appropriation plus last year's carry-over) to his list of committee-forced savings.

Mrs. Roosevelt wants to save workers' service program of WPA, which has spent \$1,000,000 during past two years working with labor unions on adult education. It employs 2,000 persons, probably will continue under an assumed name.

Next on Byrd committee's hatchet list are National Youth Administration, Farm Security Administration, various public works projects, some activities of Interior and Agriculture Departments which bear no relation to war work.

► Drums soon will beat for President Roosevelt's broad, post-war social security plan drafted by National Resources Planning Board as America's counterpart of Britain's Beveridge plan.

This, probably with some revision, will be New Deal's "bright new world" offer for the home front. Theme will be "Let's have a security worth fighting for."

Mr. Roosevelt will present the plan to

Congress when he deems the time to be ripe—not with expectation Congress will pass it, but as basis for talk, discussion, and possibly campaigning.

Congress, leaders on Capitol Hill say, will be cool toward the plan.

Other high-powered plans for post-war are in the works at National Resources Planning Board headquarters. Careful survey is now being made of plant facilities Government will own after the war, and how they can best be utilized.

Anti-New Dealers in Congress point out that Government is owner of enormous amount of factory plant built during defense era and since Pearl Harbor.

Equally significant is that Government is buying tremendous tracts of land from coast to coast.

It has bought, for Army and Navy account alone in the past year, land tracts equal in area to combined areas of Massachusetts, Delaware, Connecticut, Rhode Island, the District of Columbia, and New Jersey. More is being added daily.

Government also owns hundreds of hotels, recreation facilities, warehouses, dry-docks, shipyards, transportation facilities, retail outlets, staggering quantities of merchandise.

The Government's "plant" will play a big part in any plan evolved by National Resources Board for employment after the war.

► Republican party leaders are saying confidentially that the fight for the 1944 G.O.P. presidential nomination lies between Wendell Willkie and Governor Bricker of Ohio.

This is predicated upon belief that Governor Dewey of New York means it when he says he will not be a candidate and will quickly squelch any boom for his nomination.

Dewey has been most emphatic about staying out of the race, in both public and private statements.

Bricker is inheriting support of so-called isolationist factions. Senator Taft of Ohio, from whom Willkie wrested the party's 1940 nomination, is hard at work,

lining up southern Republicans for his fellow Ohioan.

Bricker's friends feel the chief danger to his position is that he is out in front too early, drawing the concentrated fire of the rest of the field.

They also dislike comparisons between Bricker and Warren G. Harding, contending the only point of similarity is that they both were born in Ohio.

Not in ten years has the G.O.P. felt so encouraged over its outlook. Plenty of Democrats, particularly those from the South, agree that the G.O.P. has reason for encouragement.

One outstanding Democratic member of Congress, a Southerner, recently told friends he has "repressed" his own inherent opposition to the New Deal for years because he felt the time was not ripe.

Now, he said, the time has come to oust New Dealism.

► The Office of War Information has the ammunition to carry on psychological warfare against Japan via short wave radio but can't figure out how to hit the mark.

Federal Communications officials say there are not more than 100 short wave receivers in Japan.

So Elmer Davis has to direct his efforts at dividing Japan's top militarists from the emperor and foreign office.

Plans are to reach Japanese masses through medium wave broadcasts from China.

The propaganda warriors are having better luck in other parts of the Pacific. They believe they have 30,000 daily

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listeners in the Dutch East Indies, others in Korea and the Philippines.

► Mrs. Roosevelt is looking into the possibility of recruiting battalions of women workers for American farms; billeting them in nearby villages.

She came back from England enthused with the idea after watching similar battalions work there.

At her request, government officials are learning all they can about the English system.

She proposes that American girls, now flying in England as ferry command pilots, be brought home to describe the English farm-worker plan.

Don't forget that Mrs. Roosevelt has bell-wethered many important national policies which have been written into law or presidential directives some time after she proposed them.

► Thurman Arnold's abortive effort to convict Aluminum Company of America of violating the anti-trust laws has bumped up against a curious situation in the Supreme Court.

Justices Stone, Murphy and Jackson are former attorneys general and were drawn into litigation involving Alcoa at one time or another. Same is true of Justice Reed, former solicitor general.

All four have declined to sit on the final round of the Alcoa-Arnold case. With a vacancy on the bench, this leaves only four justices available. The law says at least five must sit.

TOO LATE TO CLASSIFY: Longest face in Washington is Secretary of Treasury Morgenthau's when somebody mentions Congress. ...Public criticism aimed at an administration policy usually strikes a man. He's the goat for the policy. Regimentation policies aroused public wrath—Leon Henderson reaped the whirlwind....Army swallowed hard when Manpower Commissioner McNutt relegated Selective Service, and General Hershey, to minor status. Some of Hershey's uniformed aides wanted to quit then and there.... Former Supreme Court Justice McReynolds, unreconstructed foe

of New Dealism, watches events flow by from his window at 2400-16th Street. He declines to discuss the state of affairs publicly....Mrs. Evelyn Walsh McLean, the Capitol's leading society hostess, has cut down to a mere three or four courses her state dinners for Washington officialdom....Harry Woodhead, president of Consolidated Aircraft and Vultee, is the only major aircraft company chief who has managed to stay out of Washington during the whole of 1942....War industries which sent technical experts to the fighting fronts to report on performance of manufactured items are having censorship troubles....Grocers in Little Rock, Ark., talk about closing up for one entire day each week to catch up on price control, rationing and other red tape.... New Yorkers call Information 200,000 times a day for numbers listed in the telephone directory. Telephone officials are campaigning to reduce this unnecessary burden.... Standard cost accounting system for all business is advocated by T. C. McCobb, president of Controllers Institute of America, because of government control tangles created by varied cost computing methods....Christmas was serious morale problem in many government departments because employees didn't get time off to go to their distant homes for the holidays. ...State Department is one of Washington's busiest governmental beehives, due to political and diplomatic complications of foreign fighting fronts.... Army Quartermaster Corps has established displays of rejected clothing to show needleworkers what not to do....Food "Czar" Wickard is perhaps the quietest, most serene of the new Washington "czar" crop....U. S. Employment Service, a main link in the new labor chain, is wrestling with its own manpower troubles—can't get good men to run its offices at the pay it offers.... Service planes too cracked up for rebuilding are used in training maintenance and repair men....It won't help fill your pot today, but Brazil expects a record-breaking coffee crop this year....During the week it was released, the Beveridge report sales reached 70,000 copies—enough to pay the British government its printing costs.



IN A GREAT MOVIE THEATRE, an audience of thousands—carried out of their everyday lives—look, and listen, to the drama pouring from a strip of photographic film about one inch wide. Everything is on this—not only the living, moving scenes of the story, but on the tiny "sound track" at the left, the sound: whispered words of love . . . a terrified scream . . . the nerve-shattering roar of a dive bomber . . . an enchanting voice crooning a lullaby. Film carries it all.

Most Hollywood movies are on film made by Kodak

FROM the time when Thomas A. Edison and George Eastman worked together on the early, flickering movies, the improvement of materials for professional motion pictures has been one of the chief fields of Kodak research. Kodak has been the pacemaker, and is by far the largest supplier of Hollywood.

From "the flickers" to art Kodak's original production of transparent roll film, the key to motion pictures . . . specialized negative and positive films . . . the production of high-speed panchromatic materials . . . the modern color phase, now rapidly expanding . . . these are important scenes in the advance from "the flickers" to today's work of art, in which Kodak has played a leading role. And

there is another . . . The success of "sound" pictures hinged on making the spoken words, or music, or "sound effects," a basic part of the picture. That is what you have today, because . . .

Sound, too, is pictured

With special fine-grain emulsions, Kodak "sensitizes" film for sound recording. In effect, sound is changed into light, and this light is recorded on the film, simultaneously with the recording of the scenes. Lips move—a voice speaks. Yet the voice is also a "picture"—an effect of light on film. The voice changes from a whisper to an angry roar—each tone is a series of

"light" pictures, different in quality.

As you sit in the theatre, the process is reversed—the "light pictures" on the sound track are changed back into sound . . . The "sound" newsreels are made in much the same way.

Movies for everybody

For children, movies are education. For normal men and women they are the grandest form of entertainment, reaching almost everyone. For those distraught by worry or sorrow, they are wholesome escape. For our service men on ships or in distant camps, they are a little of everything that is needed to give a man a "lift" . . . Eastman Kodak Company, Rochester, N. Y.

SERVING HUMAN PROGRESS THROUGH PHOTOGRAPHY

Handling Wartime

IN THE WORLD'S BUSIEST

All roads of steel lead to Washington these wartime days. And it's a good thing the railroad men who planned the giant Union Station there in 1901 had the foresight to look ahead fifty years.

For now, when ample transportation facilities at the heart of the war effort are so vital, this

vast rail terminal takes in stride the greatest travel flow ever to stream through its gates.

How is it all done? Below, in picture and in word, is the story. But please don't go to Washington to see it firsthand. Avoid unnecessary travel. The Army, the Navy and men going places in behalf of the war effort need the travel

THE RAILROADS



An average of 110,000 passengers a day—increasing to 130,000 over week-ends—streams through these gates. Nearly double the daily average of the last World War. Yet so immense is the great concourse fronting train gates (you see only half of it here) that there is no crowding or confusion at peak periods. There are 30 gates for passengers. Each railroad's gate and platform signs are marked by individual colors for easy identification. A public address system, which amplifies the speaker's voice many times, sends announcements to the farthest recess of the concourse.



360,916 railroad tickets sold through ticket windows in a single month! A record. Ticket windows have been increased from 15 to 65. The long ticket booth you see here is for coach passengers. There are also city ticket offices in the business district and a special bureau for the War Department and federal agencies.



Many business men are in Washington for less than a day, so parcel checking rooms do a rushing business. 70,000 suitcases and packages cross its counters every month. Individual parcel lockers in the station now number 1,304.



The great network of tracks flowing into the Union Station. In October alone these tracks handled 108,196 locomotives and cars—an all-time record. Altogether, within the station, in the yards, in its roundhouses (yes, it has two for quick repairs and overhaul of engines)—it takes 4,500 highly skilled employees to keep train and travel movement flowing smoothly.



It's done with levers. Here, in a control tower above tracks and platforms, men deftly turn cranks which set switches to direct train movements. Before them on a big board is an illuminated diagram of the terminal track layout, with moving lights showing trains in motion.

Travel

CAPITAL

...es and trains. No additional passenger cars
...n be built until the war is over, so the equip-
...ent we now have must serve all needs, both
...ilitary and civilian. If a trip is essential, we'll
...o our best to provide for you. Otherwise,
...ease save the seats and berths for Uncle Sam!

SERVING WASHINGTON

Washington

THROUGH TWO WARS

Population, 1917 . . . 410,146
Estimated population in-
cluding suburban area,
1942 1,319,724



Taxi! Taxi!! 1,400 taxicabs an
our roll in and out at peak periods.
Washington has 1,000 fewer taxi-
cabs now, due to tire and gas curbs
and enlistments. Separate driveways
serve incoming and outgoing cars.



Information, Please. Nowhere are so
many questions asked as in Washington.
So a well-staffed information booth is
kept busy. Also, there's an enlarged tele-
phone information service, roving floor-
men, special bureaus for service men.



Where Presidents greeted distinguished
arrivals—the Presidential Suite—is now
a USO Lounge for soldiers, sailors and
marines. 60,000 to 70,000 of the armed
forces pass through Washington monthly.
In addition, there's a non-profit canteen.



A busy corner of the Reservations
Bureau. Once a staff of 25 was suf-
ficient to handle all requests for
accommodations. Now it takes a
hundred persons, each with a phone.
And more are being added.



Atlantic Coast Line Railroad
Baltimore & Ohio Railroad
Chesapeake & Ohio Railway
Pennsylvania Railroad
Richmond, Fredericksburg
& Potomac Railroad
Seaboard Railway
Southern Railway
Washington
Terminal Company

Union Station, Washington, D.C.

The Railroads Serving Washington



Your Advertising and the War

Carrying on with this war effort calls for more than the momentary striking power of our armies, the navy and our present war equipment. In addition, the concerted cooperation of the entire population is required. Keeping the home front vibrantly alert to the need for cooperation and personal sacrifice is a most important part of the war effort and provides an outlet for the high talents and tremendous influence of America's advertisers.

With your advertising you can give your Country invaluable assistance and at the same time increase your prestige. You can do this by throwing the weight of your "duration advertising" into the dissemination of information on the many vitally

important ways the home front can help win the war—through conservation, voluntary rationing, salvaging needed materials, health precautions, and by cooperating in a hundred different ways.

Whether your advertising is in the form of a machine-gun-like battery of direct mail folders and booklets, or a heavy artillery barrage of pages in national magazines or newspapers, your Government will welcome its assistance.

Through the Office of War Information you may obtain suggestions for your wartime advertising and information on all Government Campaigns which are designed to inform civilians on the help the Country needs from its every man, woman and child.

KIMBERLY-CLARK CORPORATION

Manufacturers of Printing Papers Since 1872

NEENAH, WISCONSIN

NEW YORK: 122 E. 42nd St. • CHICAGO: 8 S. Michigan Ave. • LOS ANGELES: 510 W. 6th St.

Levelcoat^{*}
PRINTING PAPERS

Trufect

For Highest-Quality Printing

Kimfect

Companion to Trufect at lower cost

Multifect

For volume printing at a price

^{*}Trade Mark

South America Comes Selling

By FRANK HENIUS

OUR machines and experts guide mechanization that may mean new goods for retailers

NEXT SPRING, help in the form of new merchandise will come to our retail stores from entirely new sources and without interfering in any way with our war effort.

This new merchandise will come from the Latin Republics, where industrial mechanization, long discussed, is now taking place.

Hitherto, Latin goods offered to our stores were produced generally by handicraft workers or small manufacturers. This merchandise rarely conformed to our ideas of styling, coloring, sizing and cutting. While Latin manufacturers have grown rapidly since war began, the handicraft industries hardly were included in this industrialization, until recently.

Industrialization perhaps is too big a word to describe what is taking place: mechanization is better. For years, this need to produce standardized, acceptable merchandise of the store type has been discussed, but the war brought action instead of words. Our Government is cooperating now with those of the sister Republics to execute at last a formerly theoretical program.

This reform is producing methods aimed at greater and more standardized production and adapting the finished articles to the needs, tastes, and requirements of U. S. customers. This requires, not only machinery, but the training of cutters, designers, stylists, experts, shop foremen and production managers. All this is being done.

For many months the United States and Latin Governments have been studying native manufacturing interests to determine availability of products and materials suited for eventual mechanization. Formerly, Latin producers, even with the best of good will and understanding, were rarely able to buy machinery they needed. The war opened new vistas for Latin producers.

In many cases, our own manufacturers either had to cease producing certain goods, due to lack of raw materials, or had to convert to war pro-



Handicrafts produced products, sought by collectors and tourists but unsuited in style, quality, coloring for retail distribution in this country

duction. Machines became idle. These machines and our Latin neighbors will come to our stores' rescue.

Already we have shipped machinery for mechanization of handicrafts and kindred manufactures to Latin America and we are combing the country for more.

More goods coming

TRANSPORTATION at present is the big problem. Already, urgently needed small machines go down by air transport. Teachers at this end and pupils in Latin America are analyzing, planning, and determining daily the goods these machines will make. Already some merchandise, the result of U. S. machinery plus Latin materials and skill, guided by our own merchandising experts, is trickling into our stores. More will come.

A striking example is a product

which had to be stopped just as it became an important sales article here. These were rubber shoes made in Brazil. Made in one piece, vulcanized out of pure Para rubber, they fitted like gloves. They were light and pleasing and, in spite of duty and freight, sold at \$1.89. The machines came from the United States. The same factory had planned also to make baby pants and rubber gloves for our retailers, but Brazil's war entry stopped it.

But many Latin industries which once were small and purely local are now replacing goods which this country imported from England, Germany, Austria, France, Italy and other nations.

Gloves, for example. Up in the Andes, on the Peruvian slopes, climate and altitude resemble so closely those of the French Alps that a kid (as fine as any that ever came from Grenoble)

(Continued on page 60)

We TOUR the HOME FRONT

Dr. C. F. Burgess, Chairman, *Burgess Battery*, Chicago, has developed a method for processing cattail fuzz into a lightweight, water resistant down. It will serve as a substitute for kapok or feathers. Plant opened at Ashippun, Wis. ★ A new war tire made from reclaimed rubber will be sold by *Standard Oil of Indiana* as soon as the Government authorizes sale of war tires now in production ★ Fifty companies in the Drug, Cosmetic and Allied Industries are donating five per cent of their annual advertising budgets to the War Bond drive.

Oneida Ltd., Sherrill, N. Y. called attention to Dec. 7 by releasing six unloaded but terrifying bombs over the plant—on Dec. 9 all employees were given passes to the movie theater where winners of the slogan contest were rewarded ★ The *James F. Lincoln Arc Welding Foundation* is sponsoring another award program—this one with \$6,750 in awards and scholarships to college undergraduates for best papers on conversion to welding from other methods ★ *Marshall Field & Co.*, Chicago, reports that there were six woman applicants for every man seeking extra holiday work. The former ratio was four to one.

Brown & Williamson's Petersburg, Va., tobacco plant was honored by the *Liberty Mutual Insurance Co.* for operating a 12,000,000 man-hour stretch without a lost-time accident ★ *Lukens Steel Co.*, manufacturer of steel plate and armor plate, increased its 1942 fiscal year production by 40 per cent over 1941 ★ *Calvert Distilleries* contributed to War Stamp sales promotion by devoting its advertising to a plea for pasting at least one savings stamp on every mailed Christmas card ★ Every one of 2,000 *Standard Oil of Indiana's* employees now in service received a Christmas package containing cigarettes, cake, cookies and other gifts.

American Optical Co. has developed a new machine for grinding lenses used in military instruments. Lenses once ground by hand can now be handled 50 at a time ★ *Crosley Corporation* officials are getting ready for their post-war program by holding meetings with dealers about the country—among changes made and which must be balanced when peace comes are outright purchase of a tool and die concern, a tripled employee personnel, a six-fold increase of the engineering staff ★ A single shipment of piston rings for 62 *Liberty* ships sent from Baltimore to San Francisco by *Koppers Co.*, weighed

57,100 pounds—rings ranged from 13 to 70 inches in diameter ★ A crew of 28 women clean 50 engines daily for the *Long Island Railroad*—their tools are a wad of cotton waste, cleaning oil and elbow grease. The company employs 184 other women as coach cleaners, crossing watchmen, a station agent and a messenger.

Goodyear Aircraft is employing more than 100 mutes in war production posts. Some have been with the company more than 25 years. Many of the newcomers are printers by trade, but have switched to such things as lining self-sealing gasoline tanks ★ Many of *Goodyear's* "unused since Pearl Harbor" tire molds are now back in production on tires made from regenerated rubber ★ *Walter P. Hill of Calumet and Hecla Consolidated Copper*, one of ten men to be decorated at the White House Dec. 10 for individual production merit, devised an improvement for fabricating artillery shell primer tubes. He augmented his work at the plant with a machine-shop in his home basement. His device eliminated five steps in what was formerly a six-step operation.

Henry Disston & Sons, recent recipient of the Army-Navy "E", award is a 103-year-old veteran—supplier of munitions in four different U. S. wars ★ *Albert Ramond, president, Bedaux Co.*, New York engineers, says the way to improve manpower shortage is to get 25 per cent more output per worker—not by speed-up slavery but by incentive payments ★ Praise the Lord and Pass the Blow-Torch, Preacher *Orrie J. Briggs* of Ft. Wayne, Ind., a clergyman for 20 years, is now a welder at the *Fruehauf Trailer Co.* plant. On a recent Sunday he worked a full shift and preached two sermons ★ *American-LaFrance* has developed a new pump tank in five and two and a half gallon sizes for use on incendiary bomb fires.

Federal Shipbuilding and Dry Dock Co. made sensational news with its launching of eight naval ships on Armistice Day—it followed that event with a twin launching of two 10,000 ton cargo ships Dec. 1. Now the company announces meatless Tuesdays for employees and has undertaken the difficult tactical problem of convincing its employees that they must substitute kidneys, liver, sweetbreads and spareribs for steak and ham.

It took Republic Steel Co. just one year to put its new Youngstown blast furnace

in operation after signing its government contract—it is the second new blast furnace built by *Republic* for the Defense Plant Corp. and the first new Mahoning Valley furnace in 25 years ★ The "MacArthur" shift from one to eight a.m. is becoming the most popular shift at the *Stromberg-Carlson* plant—production is topping day-time shifts—workers like it because they can enjoy social evenings and have fewer interruptions while working ★ *Michigan Wire Cloth Co.*, Detroit, producers of aircraft fuel strainers, is employing 61 per cent women in comparison to 16 per cent a year ago.

Cessna Aircraft Workers are recruited largely from an area within 150 miles of Wichita—25 per cent are women—more than 80 occupations from barbers to jewelers are represented ★ *Caterpillar Tractor Company* has sponsored a company of 199 officers and men to help service heavy machinery of the U. S. Engineers.

Philco has increased its storage battery production 300 per cent—celebrated its 50th birthday when it received Army-Navy award at Trenton plant.

Salvage. On one *Chrysler*-built weapon now employing only 106 parts, made by the powdered metal method, 1943 production will show a saving of 4,000,000 man-hours and 1,250,000 pounds of metal. Only 17 pounds of metal are required for a 17 pound finished part, but 30 to 70 per cent more metal is required by ordinary methods of processing ★ A new steel bell weighing 55 pounds compared to 131 pounds of the old brass bell has been developed by the *Erie Railroad*. Brass bells are headed for the scrap pile ★ More than 10,000 tons of scrap iron has been salvaged by the *Chicago & Eastern Illinois Railroad*—enough for 40,290 2,000-pound aerial bombs ★ A pattern change in brake wheels suggested by *Axel Johnson of General Electric* will save 22 tons of steel or enough for 44,000 bayonets.

American Telephone and Telegraph has saved 2,000,000 pounds of zinc and thousands more of copper, magnesium and aluminum by converting telephone set housings to plastic—among other replacement items in its physical plant which save thousands of pounds of strategic metals is a combined telephone set without a milligram of rubber ★ *Louisville & Nashville Railroad* dug 1,000 tons of old iron from an old fill ★ *Monsanto Chemical Co.* is averaging 700,000 pounds of salvage material each month in addition to reclaiming hundreds of pieces of discarded machinery.

In one four-month period, *Douglas Aircraft* saved enough materials to equal the amount used in several squadrons of light bombers ★ *White Motor Co.* gave up two museum pieces for scrap—a 1913 White passenger auto and a 1907 French-built *Clement*—also gathered every cuspidor in the plant for war conversion ★ The *Chicago and North Western Railway* started a scrap salvaging campaign three years ago when the European war started. They have saved enough metal to build 54 battleships of 35,000 tons or 344,700 medium tanks.

Questionnaires or Bombers?

(Continued from page 18)

tainer, price schedules and trade discounts, factory costs, packaging cost, labor, overhead, general administration, sales expense—and the number of like units sold in 1941 by the applicant or his competitor. Mr. Van Kirk commented:

That presents quite an accounting problem. I think you would agree that it would be very difficult for one manufacturer to find out how many packages his competitor was selling.

I estimate that we probably have had between 600 and 800 changes, conservatively. That would mean 600 or 800 of these reports. I do not believe that a competent man could fill out any one of the reports in much less than a day, and some of them would take two days.

Many of these changes are insignificant as, for instance, when, instead of using a

metal cap, we put a cork in a bottle. The O.P.A. holds that such a change constitutes a new product. We not only must submit this report but we cannot market the product until they have determined how the change will affect the price of the product.

We have tried to start that sort of work, but we certainly cannot get the people to work long enough hours, after they have done these other things, and we do not propose, unless we are instructed by competent authority, to discontinue our war work in preference to this sort of thing.

The changes, he added, were not made of his company's own volition. They were ordered by the War Production Board to conserve critical materials. The company was in the middle.

A new serum developed to combat

whooping cough fatalities, which average 16 a day among children, was held up for six weeks, Mr. Van Kirk said.

"We got only telephone calls from people in Washington asking questions. They wanted to know what 'unit' meant, what the size of the package was, 'How do you assay this?' 'How do you produce it?'"

After four or five weeks of that, Mr. Van Kirk called Washington, said he thought he probably could prove that children had died because of the delay, and promptly got a release on the serum. But that call did not, and has not, solved his bookkeeping problems.

Squibb's accounting system was designed to produce the information required by the Bureau of Internal Revenue for taxing purposes. But along came O.P.A. with a questionnaire that would have required complete revision of the bookkeeping system. The company might have established a dual accounting system, but O.P.A. submitted a second questionnaire that would have required a third accounting setup. The company gave up.

"Mr. Chairman," interpolated Mr. Morgenthau in the course of the drug executive's testimony. "Don't you think a fair way to proceed would be to give whoever is responsible in the O.P.A. an opportunity to explain to this committee just what he has in mind?"

"That is what we propose to do, Mr. Secretary," said Senator Byrd. "We thought, in consideration of Senator Vandenberg's resolution (authorizing the inquiry), that we should have the complaint made first and then give each department an opportunity to answer it. We have to establish first that there is a criticism and complaint."

Ignoring research

IN proceeding to do just that, Mr. Van Kirk pointed out that O.P.A., in arriving at costs, makes no provision whatever for the cost of research, a most important part of the drug manufacturing industry.

"We can't interest them in those problems," he concluded.

Mr. Brier took the stand to tell the committee that he agrees that many reports to Government are necessary.

"But we have now reached the point where we are up against it," he said.

"If any of those reports to which Mr. Van Kirk referred are finally made out, I question the accuracy of them, and, if they are not accurate, what good are they going to be?"

Breathless haste of some agencies gathering information on the production, inventories and sales of vitamin products was described by John J. Feldman of the White Laboratories, Newark, N. J.

The federal Fish and Wild Life Service used telegrams, he said, to hurry the return of monthly reports, recently stepped up from a quarterly basis. The Bureau of Census sends out forms for the same information, he said, as does the Army and Navy Munitions Board:

We are doing our best to cooperate, but the way they have been piling up in the past two or three months, it is going

BELLRINGERS



An Airplane Wing on Paper

The Russian-German battle line is in great part a struggle between skillful organizers. But Americans will concede no superiority in organizing ability to any other country. Preliminary organizing at the home base is just as important as combat organization. For example this desk full of orders are instructions to shop workers for building one wing of a Douglas Troop Transport. Dick Besley, a Douglas production planner, has prepared written instructions here for complete assembly of the wing after studying the engineer's blueprints. For every blow of the rivet gun in building warplanes there is an equally important stroke of the pencil.

to be physically impossible, with the manpower we have, to answer these questionnaires, if we ever get to answering them....

H. E. Foreman, managing director of the Associated General Contractors of America, indicated that not even the 24,000-word instructions sent out with each Certificate of War Necessity form by the O.D.T. to the Nation's 4,899,000 truck owners have clarified truck and tire reporting problems encountered in the construction industry.

General building contractors, engaged almost 100 per cent on war construction, must make 47 reports regularly, distributing them to four federal agencies, he said. Executives, he added, spend 80 per cent of their time on reports.

"It is quite a difficult thing to get across to the individual truck operators, for example, what they are to do each day," Mr. Foreman said. The whole system costs money, he pointed out, with reports of various kinds going to local boards, state agencies, directly to Washington, and some to two or more places. It adds approximately ten per cent to the cost of the project, he said.

We can't eat figures

WASHINGTON offices of the American Farm Bureau Federation have been deluged with complaints arising on farms in connection with wasted rubber, mileage, time and expense involved in obtaining gasoline certificates for farm trucks, Hugh F. Hall, assistant director of the offices, reported.

"The complexity of the forms undoubtedly has greatly and unnecessarily complicated this problem," he said. "It also has resulted in the possibility of a serious decline in food production next year."

"I hear a lot of talk about increasing farm production, and that food will win the war," said a farmer in a letter which Mr. Hall read into the record. "But, if Washington does not wake up pretty quick, we will most certainly lose this war because agriculture will be so strangled that there will be no more food."

Fred Brenckman, Washington representative for the National Grange, said that "it has come to our attention that some large utility companies which keep very comprehensive records have been obliged to spend \$50,000 in some cases to give even a partial estimate of the information with regard to mileage and operation that is required on this (truck certificate) application form."

His point was that there is slight chance that farmers have or are able to get the information demanded.

Yet, if they knowingly make a false statement, they face a \$10,000 fine, ten years in prison, or both.

Merchants who fail to make O.P.A. reports may be hauled into federal court on charges of contempt.

"It seems to me that the burden of paper work, the enervating red tape which is fastened upon American business and upon the individual American citizen as the result of rationing and other regulation, is a daily menace to national morale and a serious threat to the war effort itself," Senator Vandenberg declared. He went on:

"I have had thousands of letters begging for relief. Some of our bureaucrats are running wild. They are flooding the country with ponderous questionnaires which not only demand a detail of information which it is impossible for the average citizen or the average business to answer, but which also strike positive terror to the hearts of citizens who wish to be totally loyal yet

who find their loyalties channeled into maddening inquisitions. Something must be done about it.

"It is costing manpower and it is costing money which ought to be dedicated to more emphatic purposes."

The success of "the war with Washington" depends on willingness of the victims of bureaucracy to tell their stories on a friendly forum, he said.

Salesmen Beat the Rap

By J. GEORGE FREDERICK

"ALL types of salesmen now have been eliminated from the preferred class in gasoline rationing..."—O.P.A. news release.

The old-fashioned "drummer" has been floored again and again since Pearl Harbor by such things as the curtailment of civilian goods, directives aimed at eliminating all "non-essential" labor, the draft, and curbs on traveling.

Against all these obstacles salesmen are striking back—with ideas proving again and again that—like Salvation Army clients—the good salesman may be down, but he's never out.

Onto the war-time-selling scene has come, among other things, the sales caravan, which is rolling up a distinctive record. Tried out before gas was too hard to get, it has become more or less of a necessity under nation-wide gas rationing, stringent curtailment of all but the most essential driving, and threatened rationing of train space. Airplane sales travel has been out since Pearl Harbor.

Although conceived six years ago, in peace-time, by Miss Syd M. Gordon of New York City, who planned the first modern sales caravan for clothing salesmen to reach small-town New England dealers not contacted ordinarily, the idea did not become of national interest until P. B. Hayes and Nat Roth, two Florida salesmen, organized the Southeastern Caravan in Miami last August.

After discussing their plan with Mark Max, director of the Miami rationing board, who was impressed favorably, the two men within a short time enlisted 25 drygoods salesmen to give the idea a trial, which meant that these salesmen would store their cars, swear fealty to the caravan and travel in a chartered bus in the future.

Their first trip proved the idea to be feasible and economical. Instead of renting individual sample rooms, the salesmen took whole hotel floors and put on bang-up fashion shows, pooling expenses. A truck with the samples (averaging 300 pounds per salesman) followed the bus. Before the trip, the plan was well-advertised in "key" cities in which the caravan stopped, as well as at small towns within a 100-mile radius of the large cities.

On the first two-and-a-half-week trip, the combined sales of the group were well over \$500,000, the time spent in covering the territory cut in half, on an average, and, most important, the trip saved much gas and rubber. The average salesman in the group once traveled 20,000 miles annually (500,000 miles for

the group), while the caravan's tour in one year will be less than 10,000 miles, since it goes only to key points.

At five cities—Miami, Tampa, Orlando, Jacksonville and Tallahassee—the caravan set up shop, relieving the salesmen from traveling to smaller towns. Retailers generally were as pleased with the idea as the firms represented. At the Tampa show, for example, more than 200 merchants from Florida's West Coast attended the displays on one day. Advantages to buyers are that they can compare merchandise offered and do not have to talk to 25 different salesmen at 25 different times in their stores.

The novelty of the enterprise brought new customers, one salesman reporting 20 "brand new" faces on one day.

Obviously, there are some disadvantages to retailers in the caravan idea. The Florida plan to take in just five key cities, with the merchants from a wide radius coming to the sales show, might result in less cooperation, once retailers feel the gas pinch severely. However, by shrewd advance advertising, attendance has been good thus far and results "very encouraging," sponsors say.

Products sold in caravans in New England and Florida generally are in the "soft" lines, but no two caravan salesmen usually carry the same line. When a salesman caravan-member is ill, or unable to take the trip, another salesman is chosen from a waiting list of more than 60 in Florida.

The plan is being applied all over America now, with many variations—and gives promise of living long after the war. Marketing and sales analysts, interpreting the trend, ask:

"Why not? It will cut distribution costs, ease the time-demands of many buyers, and, altogether, represents real economy of resources and money. The Chicago Merchandise Mart proved long ago the need for more economical sample showing and selling effort."

Every one of the past five decades has seen a marked change in sales technique, as drummers have adjusted themselves to new conditions. The 1893 depression stirred John Patterson to broaden sales supervision and introduce standardized sales arguments; the 1903 depression brought the quota system; World War I stimulated sales research, and the depression of '29 developed the gearing of production closely to consumption.

Will this growing trend in World War II change future traveling methods for salesmen? Only time can tell.



when things become scarce, it's time to take extra precautions

Among the more important things now becoming scarce is a place to live . . . which suggests to home owners the wisdom of taking these four extra precautions.

• • •

First, check your house from cellar to attic for fire hazards. Second, be sure you are carrying sufficient fire insurance to cover present replacement costs. Third, make provision for War Damage Insurance. Fourth, make your "place to live" protection really complete by carrying insurance that pays the rent of temporary quarters in case your home is damaged by fire.

• • •

A good way to put yourself on this safer basis is to consult your local

agent or broker who represents the Aetna Fire Group. These representatives can give you prompt and authoritative information on how to adjust your insurance to war conditions. They can tell you just what to do in event of loss.

• • •

Here is another extra protection you get when your insurance is with a capital stock company such as those comprising the Aetna Fire Group. Your policy is backed by both a paid-in capital and surplus. You are never liable for assessment.

• • •

Don't Guess About Insurance
—CONSULT YOUR LOCAL
AGENT OR BROKER

Since 1819 through conflagrations, wars and financial depressions, no policyholder has ever suffered loss because of failure of the Aetna to meet its obligations.

WARS	CONFLAGRATIONS	DEPRESSIONS
1846 Mexican War	1835—New York City	1819
1861 Civil War	1845—New York City	1837
1898 Spanish-American War	1851—San Francisco	1843
1917 World War I	1866—Portland, Me.	1857
1941 World War 2	1871—Chicago	1873
	1872—Boston	1893
	1877—St. John, N.B.	1907
	1889—Seattle; Spokane	1921
	1901—Jacksonville, Fla.	1929
	1904—Baltimore	
	1906—San Francisco	
	1908—Chelsea	
	1914—Salem	
	1941—Fall River	



The Aetna Fire Group

HARTFORD, CONNECTICUT

Aetna Insurance Co. • The World Fire & Marine Insurance Co. • The Century Indemnity Co. • Piedmont Fire Insurance Co. • Standard Insurance Co. of N. Y. • Standard Surety & Casualty Co. of N. Y.

“Know-How”

SAVES MANPOWER, MATERIALS AND MONEY—AND GETS THE JOB DONE

*Fortunately for all of us,
American Industry has this “Know-How”*

THEY said that America was unprepared for war and could not arm in time. But they overlooked our “secret weapon”—industrial “know-how.”

They forgot that in America free enterprise had for years been encouraging—stimulating—urging men to learn how to make things better and better—in greater volume—at constantly lower costs.

Now that the needs of peace have given way to the demands of war—now that “Victory is our business”—our training in this mass production is making itself felt.

And today Victory is *your* business—just as it is ours.

And as a “stockholder” in Fighting

America you want to know how well your business is operating; whether the experience and skills developed under peaceful American free enterprise are proving valuable now; whether we have acquired an ability—a “know-how”—which is equal to the demands of total war.

So one organization gives you herein a few of the many examples of how American “know-how” is getting the job done—is saving manpower, materials and *hundreds of millions of dollars!*

These are some of the things being done to avoid the tragedy of “too little and too late”—to make sure that your boy at the front has every advantage of superior equipment and protection.

General Motors Employees Set New Record

Although 37,892 General Motors employees are in the armed forces, employment for November of this year in the United States was 20.2% above that of the same period in 1941. Payrolls were up 51.0%. Average hours of work were up 17.3%.

From their earnings, General Motors men and women are purchasing War Bonds in ever-increasing volume.

GENERAL MOTORS

An EXAMPLE—HOW GM APPLIES MASS-PRODUCTION TECHNIQUE TO MACHINE GUNS



This story of quantity production methods in the manufacture of one type of machine gun illustrates a principle exemplified throughout General Motors' production for war. Design improvements and production short-cuts have been made possible by the close cooperation and assistance of original manufacturers, machine tool producers and the Army Ordnance Department.

- 1. INCREASING OUTPUT**—Many new processes, new tools and design changes have made possible double the output in the same man-hours. Manufacturing capacity and manpower were released for additional vital war tasks.
- 2. REDUCING COST**—Production short-cuts, material savings and expanding output have reduced the original cost by half, with consequent important savings in the nation's expenditure for war material.
- 3. RAISING QUALITY**—Design changes for quantity production have likewise raised quality. Many of the more than 200 changes have helped to make possible superior performance, added durability.
- 4. CONSERVING MATERIALS**—Many thousands of pounds of vital materials were conserved through better processing and the substitution of less critical materials. The number of special steels was cut from 44 to 15.

STEEL REPLACES ALUMINUM



Aeroproducts Division is now building stronger, lighter propellers by substituting hollow steel construction for solid aluminum blades.

Saving—100 to 200 lb. of aluminum per propeller. Saving—75 lb. in weight of complete assembly

SPEEDING ENGINE PRODUCTION

At Allison Division, new multiple-spindle drills perform 14 lapping operations simultaneously, superseding single radial drill operation in these liquid-cooled aircraft engines. For this operation:



Time Reduced—80%
Production Up—393%
Machines released for other work

SUBCONTRACTING



Of 132 parts in an aircraft cannon, Oldsmobile, as prime contractor, builds three basic parts. Production of the remaining

129 parts is spread among 53 subcontractors, working under GM direction, who already had the necessary manufacturing equipment.

REDESIGNING REDUCES COST

As redesigned by Pontiac, shoulder rests for Oerlikon guns have been made simpler and less expensive. Shoulder rests are now completely adjustable for every size gunner.



This improvement reduced cost per gun \$45.00

NEW MACHINES DO NEW JOBS

Cadillac craftsmen designed completely new machines for producing this complex part, a supercharger rotator vane, effecting important savings in time and material.



Time per piece reduced from 125 man-hours to 10. Material saved, 496,000 lb. per year

CASTINGS FOR FORGINGS



"ArmaSteel" castings supplant steel forgings, save large quantities of vital materials and many man-hours of machining time because there is less excess metal to be removed. Development of GM Research Laboratories and Saginaw Malleable Iron Division.

BIG SAVINGS FROM SMALL ITEMS

In tank manufacture at Fisher Body, attaching a 3-inch piece of common steel for electrical connection at the end of each welding rod is saving an important amount of critical welding material.



TWELVE TIMES AS FAST

At Buick, a newly designed electric welding machine makes it possible to speed up welding of Diesel engine crankshaft balancers from 3 to 36 per hour.



SUBSTITUTION SAVES MATERIALS



Previously drawn from brass and then nickel- and silver-plated, headlamp reflectors are now drawn at Guide Lamp Division from less critical steel, enameled and coated with vaporized aluminum. Metal used per 100,000 vehicles:

OLD TYPE	NEW TYPE
65,000 lb. Copper	78,000 lb. Steel
32,000 " Zinc	5 lb. Aluminum
275 " Nickel	
160 " Silver	

WEIGHS 1/5 AS MUCH



Developed by General Motors Research Laboratories and produced by Electro-Motive Division, this newly designed "Pancake" Diesel engine weighs 1/5 as much as and takes only 1/3 of the space of any previous ocean duty Diesel of the same horsepower. Helps provide new Navy sub chasers with:

Increased speed
Longer cruising radius

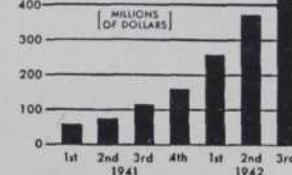
CONSERVING VITAL MATERIALS



Chevrolet engineering ingenuity has developed satisfactory substitutes resulting in the following critical materials saved per 100,000 military vehicles:

5,000,000 lb. Rubber	
1,200,000 " Nickel	
500,000 " Copper	
200,000 " Chrome	
125,000 lb. Latex	70,000 lb. Tin

GM DELIVERIES OF WAR MATERIALS



IT TAKES A LOT
OF MONEY
TO WIN A WAR—
BUY WAR BONDS
AND STAMPS



EVERYBODY Buy More War Bonds and Stamps

It's your boys—AND YOU!—who must win this war. They, with their daring and their fighting ability; you, backing them up with your money that must buy them their guns and ammunition, planes and tanks, equipment and supplies.

Don't fail the boys! Buy War Bonds and Stamps for all you're worth—the way they fight!

"Victory Is Our Business!"

O. P. A.'s Chief of Police

(Continued from page 38)

drinks an occasional cocktail (not enough to have a preference), is not married, not engaged and is 2-A in the draft, meaning that somebody has convinced his draft board that he is more valuable to the war effort as O.P.A. "police chief" than he would be as a buck private; that he lives in a private room at the home of some old friends in Washington, that he owns a 1937 Ford car, has an "A" card, is a member of Beta Theta Pi and Phi Delta Phi fraternities, is a Presbyterian by birth and upbringing, Republican by the same processes, though he now votes the straight Democratic ticket—vehemently.

If you still want to ask personal questions, you can learn (if you are determined to kill a busy man's time) that Mr. MacChesney voted by absentee ballot in the last general elections in Chicago, Ill., but that his staunch Republican father was on the winning side this time, which made the father very happy and the son very thoughtful. You learn that Mr. MacChesney is acquainted with many New Dealers around Washington, notably James M. Landis, Thurman Arnold, Frank Murphy, Francis Biddle, Leon Henderson and several others, but

that he has never shaken hands with Franklin D. Roosevelt.

They know one another only by reputation.

Further questioning (awful to kill a man's time like this!) will disclose that Mr. MacChesney went around the world on the college cruise of 1926-'27 (the ill-fated University Afloat); that he has been in most European countries as "just another tourist"; that he studied during the summer of 1934 at the University of Dijon, France, having won a Carnegie Fellowship in International Law after graduating *summa cum laude* with the degree of Juris Doctor from the University of Michigan Law School; that he graduated first from Yale, that he plays a little golf, likes "squash rackets" better, but isn't getting a chance to do either lately; that he was an Ensign in the Navy's Bureau of Navigation in Washington at the time—July 31, 1941—he was "drafted" to head O.P.A.'s enforcement division.

He thinks it's showing egoism to say so, but since he was asked point-blank, he had to say that he did not seek his present job, that he was "sought out and asked to take it," which is another way of expressing the thought that Mr. MacChesney may not be known back in the

hinterlands, but he's ace-high in Administration circles and is looked upon as a young man of great intelligence and administrative ability.

In conversation, Mr. MacChesney, if he's talking about business in general, may startle you by saying that "the anti-trust laws are broken every day in the year by thousands of businesses and every lawyer knows that under our system, this must be true on the face of it, but Congress puts up the money and says to enforce these laws, so cases are made."

Since this comes out of a clear sky, so to speak, and you haven't mentioned the anti-trust laws, you may ask: "Do you think that violation of O.P.A. laws, by the larger businesses particularly, is deliberate, or the result of misinterpretations, carelessness or other possibly-excusable reasons, granted that the violators benefited in no way financially from breaking the laws?"

He'll dodge that one neatly and say that he thinks "economic pressures" cause many violations.

"Economic pressures make men in business do any number of things."

A piercing legal mind

YOU hear that expression, "economic pressures," many times in even a brief conversation with Mr. MacChesney. Somehow, you get the idea that he thinks "economic pressures" are the cause of all our faults and that, if some social system could be devised (put into practice, more accurately, since it has been devised) to do away with such pressures, we'd all be good men and true.

He has, you can tell, a piercing legal mind and occasionally he starts quoting some legal text without meaning to do so. Somehow, you feel that it would have broadened his perspective and increased his understanding to have been without money or friends for a few weeks in a strange city.

It's easy to tell when you're asking something Mr. MacChesney doesn't want to answer. With no change of expression, he exudes impatience and it's not unfair to say that sometimes you feel chastised when he replies. He is adroit at overlooking categorical questions and can make an answer quickly that seems to (but does not) have a bearing on the question asked.

"I can't go into that," he says, shortly, when you step on dangerous ground, such as discussing some statement by some other O.P.A. official that parents will be "policed" against the possibility of obtaining a second cup of coffee through giving wrong ages for their children, or the like.

Mr. MacChesney likes to deal in overall figures. He is perfectly willing to tell you that, as of November 15, 1942, O.P.A. had eight regional offices, 48 state offices and one each for the western possessions and the District of Columbia; that he has approximately 250 lawyers and 1,250 investigators working in his division throughout the country now. Furthermore, he is constantly irritated because these are being drafted, or enlisting, or quitting for better jobs.

He suggests he would need 2,500 lawyers and 6,000 investigators to do a

BELLRINGERS



Watch Dogs for Water Stations

The problem of properly guarding the Auburn (Me.) Water District Pumping Station despite manpower shortages and high labor costs was solved by Horace Cook, superintendent, who bought Rover, a Great Dane, and put the canny canine to work. The 165-pound dog, 18 months old, was hired a year ago, trained thoroughly, then put behind a seven-foot wire fence (floodlit at night) to warn of strangers. Mr. Cook says Rover costs less than \$2 a day, is a perfect "saboteur alarm," and adds: "We have no sleeping on the job, no union check-off worries and no griping." First dog to be so employed in Maine, Rover now has fellow-workers in many cities.



a vital artery for **V**ictory

There's no bottom to the appetite of war. To help feed it the Great Northern Railway is transporting millions of tons from America's Zone of Plenty—iron ore and dairy products from Minnesota; grain and potatoes from the Dakotas; copper, oil, cattle, sheep and wool from Montana; lumber, grain, fish and fruit from Idaho, Washington, Oregon and California. For example: this year Great Northern will haul enough iron ore from Minnesota's Mesabi Range to load a single train 2000 miles long—an all-time record.

All this in addition to the movement of war materiel, fighting men and war workers.

Great Northern was in 1A shape when war came—fit and ready for service with heavy rails, well-ballasted roadbed, automatic block signals, freight and passenger cars of all types, and motive power designed for each specific job—diesel, electric, coal and oil-burning steam locomotives.

Moreover, this railway is a short, straight, low-altitude route between the middle west and Pacific ports—gateways to Alaska, Hawaii, Australia, China and all the embattled Orient. Recognized by shippers and travelers as a dependable railway, Great Northern now is serving the nation as a vital transportation artery.

GREAT NORTHERN RAILWAY

BETWEEN THE GREAT LAKES AND THE PACIFIC, ROUTE OF THE EMPIRE BUILDER



"bang up" enforcement job, but he talks about this as if it were Utopia and you realize he believes the war will be over before he ever perfects the organization. He has "80 or 90" lawyers in his division's offices in Washington and says they are all overworked.

Mr. MacChesney has the power to demand from any businessman any information he considers necessary to the preparation of a regulation or price schedule. He can require information under oath, can call for the inspection of any book or papers in a business house, and can issue subpoenas which, if ignored, put the recipient in contempt of federal courts.

Four branch chiefs head up Mr. MacChesney's organization. They are Arthur Carstens, chief of the Investigations Branch; Maxwell E. Foster, chief of the Compliance Branch; Talbot Smith, chief of the Trial Litigation Branch, and Harry Jones, chief of the Appellate and Briefing Branch. Each branch is subdivided into smaller branches and so *ad infinitum* until you get to the actual investigator in the field.

This field investigator is the fellow who will be coming around to check your inventory lists. Mr. MacChesney does not want former policemen, detectives or similar law enforcement officers for this work. He would much rather have young men who have had accounting or economics experience.

His investigators have little actual police power. They cannot throw you in jail. They must make their cases and turn them over to the Department of Justice, which does the prosecuting. They can sue you in civil actions.

If every agent has as little desire to snoop around homes or question children as Mr. MacChesney, the average American can be at ease on this score.

Just getting warmed up

MR. MACCHESNEY is going to stick to business—and by that, is meant businessmen. He feels that they are the ones who are most subject to "economic pressures." He knows that, with only 250 lawyers and 1,250 investigators in a nation of 132,000,000 persons he has scant hope of policing consumers, although he wouldn't say that for the world. He just won't talk much about this phase of the program.

Considering that there has been an enforcement division of O.P.A. since July, 1941 (at least in theory), the record—300 cases referred to the Department of Justice for criminal prosecution, 300 civil cases, 750 license-warning notices, and 150 dealers suspended—does not sound so impressive, but the division is just now "getting warmed up for its work," as one O.P.A. man expressed it.

Mr. MacChesney explains what has happened very simply. The day he was appointed, the enforcement division was there only in name. It was operating, as was the O.P.A., only under executive order and had "very little" cash. When the actual laws came along in January, there was still little money. Actually, it was March (when the Second War Powers Bill was passed) before O.P.A. could start hiring enforcement personnel.

One of Mr. MacChesney's biggest jobs

still is building an organization. He has 12 rationing programs, more than 230 maximum price regulations, in addition to the General Maximum Price Regulation, and rent ceilings in "hundreds of cities," to enforce.

Mr. MacChesney's division issued 4,000 warnings simultaneously one November Saturday to 4,000 retailers, telling them that if they didn't stop disobeying the law, they would be forced out of business. At the same time, it was estimated that 400,000 other retailers were also disobeying the laws.

Biggest single day's work done by Mr. MacChesney's division before this mass warning was the institution of simultaneous suits against 122 meat-packers. These cases are still pending.

He hopes, "when all this is over," to go back to school-teaching, as he has done before. After becoming legal secretary to James M. Landis, then commissioner of the Securities and Exchange Commission, Mr. MacChesney was associated with the Chicago law firm of Sidley, McPherson, Austin and Burgess. In the fall of 1940, he was named associate professor of law at Northwestern University. He has served also as special assistant to the Attorney General of the United States in the anti-trust division of the Department of Justice, as acting chief of the Wage and Hour Unit of the Department of Justice, in charge of criminal enforcement of the Wage-Hour Law, as faculty instructor and tutor in the Government Department at Harvard University, and as associate professor of law in the School of Jurisprudence, University of California.

His boss is youthful C. David Ginsburg, O.P.A. general counsel, who reports directly to Leon Henderson.

You would learn little about Mr. MacChesney's family if you waited for him to tell you. In conversation, if he mentions his father, he refers to him only as a "corporation attorney." But if you ask him if his father is Nathan William MacChesney, Judge Advocate of the American Expeditionary Force in 1917-18, former president of the American Institute of Criminal Law and Criminology, former president of the Illinois Bar Association, former vice president of the American Bar Association, consul-general to Siam in 1924, high commissioner for the Canada Century of Progress Exposition in 1933 and 1934, a trustee of Northwestern University and senior member of the law firm of MacChesney, Becker and Wells in Chicago, the young man will answer in the affirmative.

Nathan William MacChesney, one of the most distinguished members of the American bar and known in international circles as a lawyer, diplomatist, officer and author, is just "the fellow I can't live up to" to his boy, Brunson. Another son, Gordon, is connected with the State of California.

When you discuss his father with O.P.A.'s police chief, you get the idea that, when the young MacChesney goes home to Chicago and finds *The Tribune* on the end-table, he goes out and buys a copy of *The Chicago Sun* and reads it, while his father reads *The Tribune*. You can be sure that, when they discuss politics, they know how far to go.

South America Comes Selling

(Continued from page 51)

is produced. Gloves from these skins satisfied the local trade, but shipments to the United States proved that cut, style, thickness, and fastenings were unacceptable to our customers. So samples were shipped to Peru by a large New York buying establishment. Designs and color schemes were supplied, dies and machines for polishing, smoothing, cutting, sewing, and stamping the leather were sent down. Now the quality of imported Peruvian gloves measures up to the former French product.

The same applies to handbags. Since early 1942, more and more Latin-American handbags, card and cigarette cases, and similar leather goods, have been sold over United States counters. They are made from skins and hides of crocodiles, alligators, snakes, lizards and sharks. While most Latin countries producing these goods already manufactured certain quantities for local use, such goods could never satisfy our shoppers. Before the war, we prized imports from Paris, Vienna, Offenbach-am-Main and London. Now Latin America has accepted and adopted our styles, imported our machines to produce the finished articles.

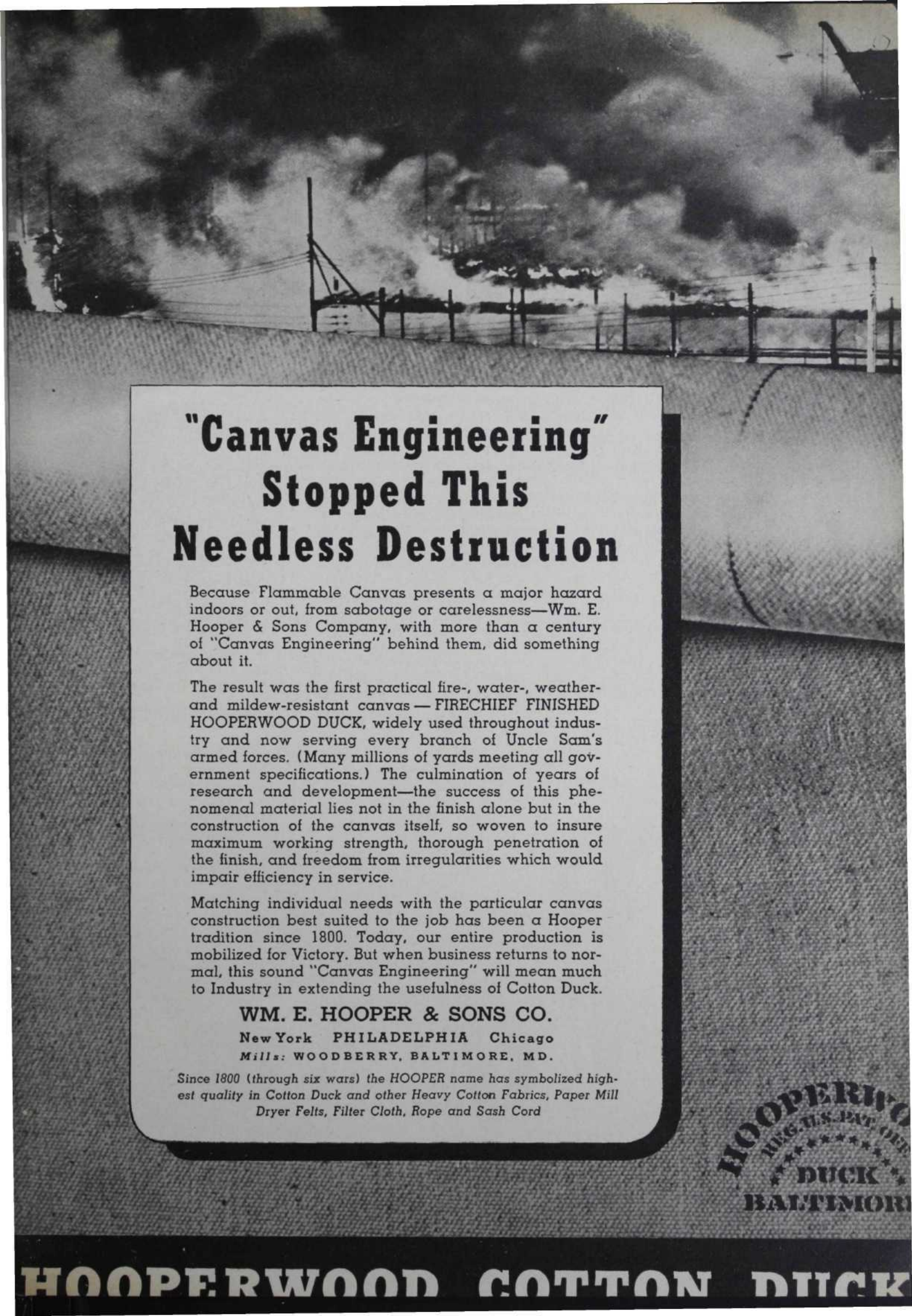
Columbia produces tagua, or ivory, nuts. For ages, natives have worked these by hand, carving them into but-

tons, trinkets, rings, ornaments. Last year, one of that country's enterprising industrialists, Hijos de Domingo Marino, came to the U. S. to study buttons. Then he bought machinery and shipped it home. His buttons are now taking an increasingly important place in our domestic industry.

Wool from Argentina and Chile formerly was shipped principally to England and returned to us (and to the Argentines and Chileans) as finished goods, made in Britain. Now United States machinery and looms have been shipped to these Good Neighbors and their wool is scoured, spun and woven locally into sweaters, scarves, and all manner of goods.

This mechanization process in Latin-America extends to a great variety of merchandise—electric kilns for pottery to supplant primitive heating methods; blowers to manufacture glass; looms for carpets and blankets; boot and shoe-making machinery; cutting and pressing machines for brief and suitcases; household utensil machinery, textile looms for many different products, including laces, machines for the production of woven hats, sandals, bags and slippers.

When the war is over, many of those Latin producers will have a firm foothold in our markets.



"Canvas Engineering" Stopped This Needless Destruction

Because Flammable Canvas presents a major hazard indoors or out, from sabotage or carelessness—Wm. E. Hooper & Sons Company, with more than a century of "Canvas Engineering" behind them, did something about it.

The result was the first practical fire-, water-, weather- and mildew-resistant canvas — FIRECHIEF FINISHED HOOPERWOOD DUCK, widely used throughout industry and now serving every branch of Uncle Sam's armed forces. (Many millions of yards meeting all government specifications.) The culmination of years of research and development—the success of this phenomenal material lies not in the finish alone but in the construction of the canvas itself, so woven to insure maximum working strength, thorough penetration of the finish, and freedom from irregularities which would impair efficiency in service.

Matching individual needs with the particular canvas construction best suited to the job has been a Hooper tradition since 1800. Today, our entire production is mobilized for Victory. But when business returns to normal, this sound "Canvas Engineering" will mean much to Industry in extending the usefulness of Cotton Duck.

WM. E. HOOPER & SONS CO.

New York PHILADELPHIA Chicago

Mills: WOODBERRY, BALTIMORE, MD.

Since 1800 (through six wars) the HOOPER name has symbolized highest quality in Cotton Duck and other Heavy Cotton Fabrics, Paper Mill Dryer Felts, Filter Cloth, Rope and Sash Cord

HOOPERWOOD
REG. U.S. PAT. OFF.

DUCK

BALTIMORE

HOOPERWOOD COTTON DUCK

Are We Controlling the Right Prices?

By ELMER PENDELL

A DIFFERENT view of a perplexing question by a scholar who would give up luxuries

PROBABLY the most talked-about man in America today is Leon Henderson, Price Fixer Extraordinary.

Price fixing, in one way or another, reaches the pocketbooks and the stomachs of nearly 133,000,000 persons daily, and the Henderson type of price fixing reaches their eyes and ears as well as their pocketbooks and stomachs.

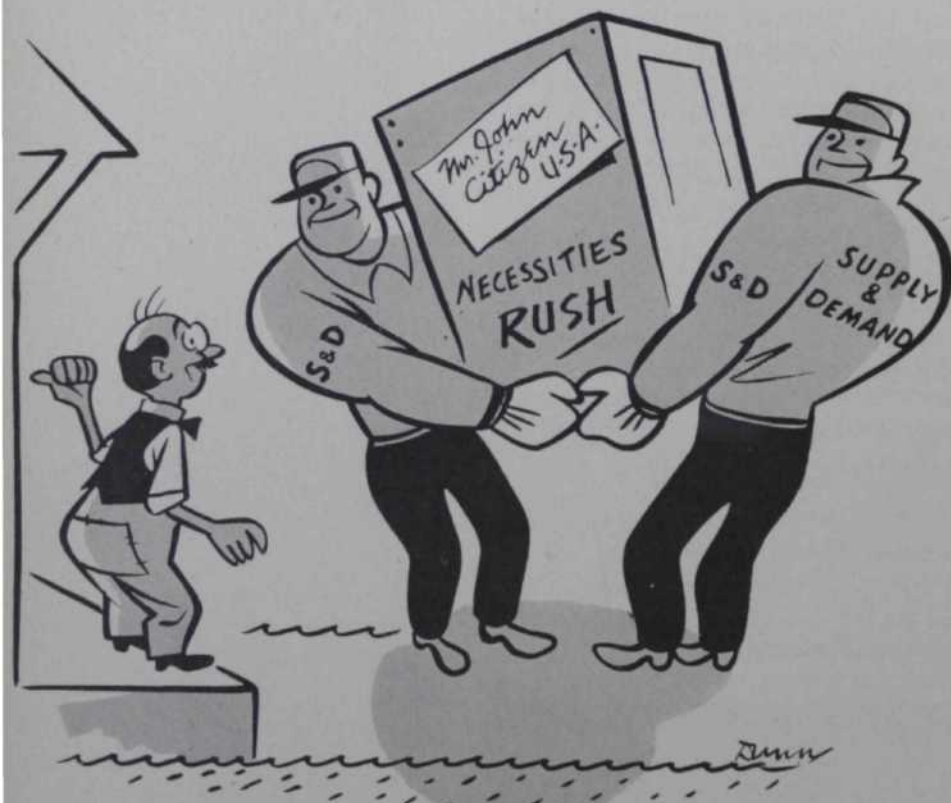
In examining the working of the Henderson plan we must make some comparisons with previous price control experiments. In the First World War, the primary objective was not to keep prices down but to *assure a sufficient supply of goods*. The Food and Fuel Control Act of those times did include provisions to prevent monopoly hoard-

ing, and injurious speculation. But the primary purpose was to stimulate supply—and that was the outstanding result.

The Government "pegged" prices at high figures. Notice that the method conformed with the laws of supply and demand. In effect, the Government put itself in the market sufficiently to boost the prices to the levels announced. Wheat, for example, from a much lower previous market price, was pegged at \$2.00 a bushel in 1917; at \$2.20 in 1918; and at \$2.26 in 1919. Army and Navy buying prices were similarly higher than would have been immediately necessary. In fuel and metal production, the price incentive was likewise relied on to get the goods. As Prof. Lewis H. Haney reported in reviewing the effects of the First World War price control, manganese ore, quicksilver, copper, steel and crude oil were produced in volumes that would have seemed miraculous a few years before.



Ceilings on luxuries would curtail their production naturally



Freely moving competitive prices for essentials would attract workers and materials to ensure production of necessities

Given an overall policy of winning the war, compare that result with the present shortages in steel, and in labor for the sugar-beet fields.

The proponents of the present mode have legitimate criticisms of the earlier price control methods. "Cost plus" promoted inefficiency; and fixing prices on a basis of costs of high cost producers permitted profiteering. Inflation increased costs of war materials. Unnecessarily high "pegged" prices drew low producing mines into production and embarrassing surpluses of manganese, coal and some other products, developed.

For the win-the-war objective, however, even some of these shortcomings "leaned toward virtue's side." In contrast, although the present procedure is holding down prices in some measure right now, it is developing scarcities. Already, because we have "ceilings" over prices instead of floors under them, steel mills have been forced to run at less than capacity. A slightly higher price per ton for scrap would have brought to life the long accumulated junk of the auto graveyards. Meat is scarce in part because packers, limited by price ceilings, have held the buying

IN THE HEART OF EVERY WAR PLANT IS A BOMB LIKE THIS

• Fires in our war plants are just as destructive if set by accident as if caused by incendiary bombs. And Carelessness is as much the servant of the Axis as is Sabotage.

In 1941 fires in the United States caused \$303,895,000 loss. A similar loss in 1943 would spell more than national financial loss—it would mean a defeat equal to a drastic military or naval loss.

As part of the Citizen Army in an America in which there

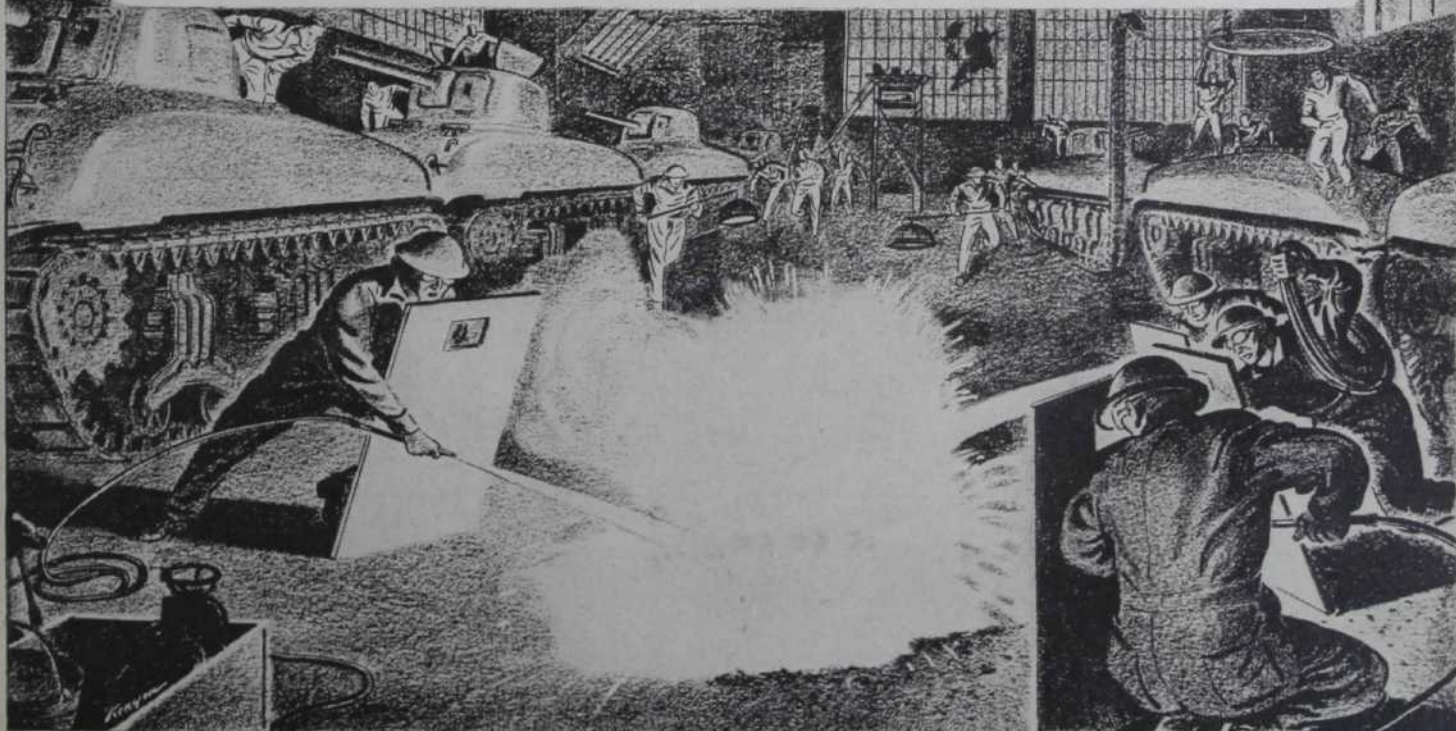
are no more non-combatants, make it your job to join in winning the Battle of Industrial Safety. You can help prevent fire loss by doing just one simple thing for the war's duration. It is this:

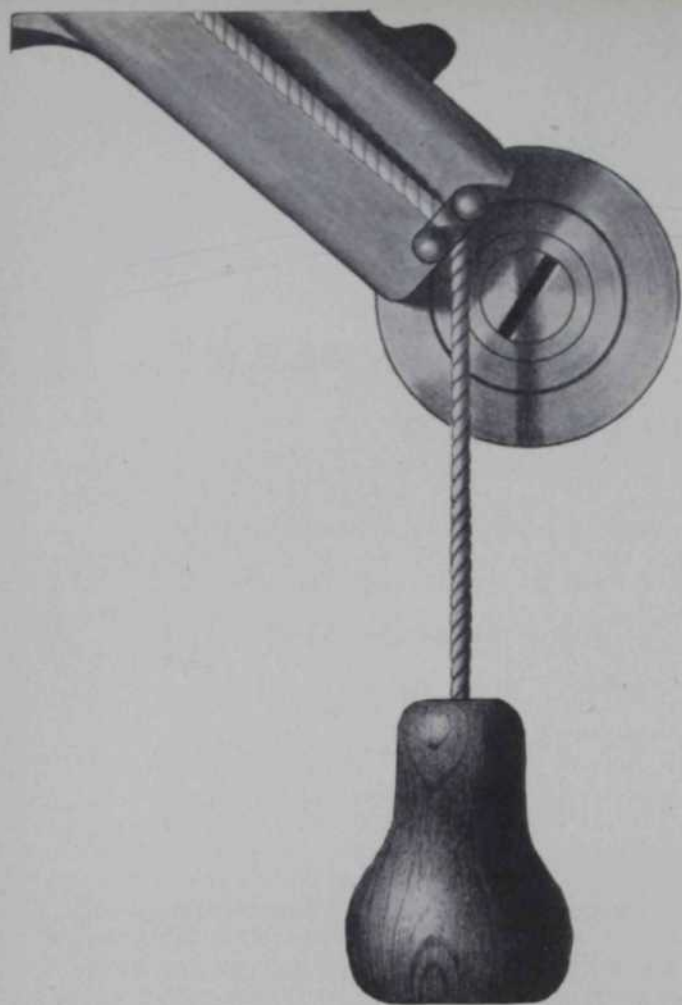
Be EXTRA careful about Fire!

When essential materials burn, they are gone! Insurance can only furnish funds to replace them.

☆ THE HOME ☆
Insurance Company
NEW YORK

FIRE • AUTOMOBILE • MARINE INSURANCE





"In case of Tank pull string"

WHEN AN ENEMY tank approaches, the American soldiers behind this anti-tank gun won't need any written instructions.

One pull on that lanyard and—wham!—look out tank! The armor-piercing projectile gets *inside* the tank's hide to explode its deadly charge—because the projectile's steel jacket contains *chromium*!

Before the war, domestic production of chromium ore accounted for less than 1% of this country's requirements. Today, over 50% of our needs comes from Montana mines served exclusively by the Northern Pacific Railway. Armor-piercing shells, armor plate, gun barrels, truck chassis, tank ball-bearings, and hundreds of other steel parts that demand super-strength, all call for chrome-steel.

To make this vital steel, carloads of chromium ores required by electric furnaces roll eastward every day via the "Main Street of the Northwest".



"MAIN STREET OF THE NORTHWEST"

price too low to make steer fattening profitable. The resultant shortage in beef has stepped up the demand for lamb, and its price has risen. A new ceiling placed on lamb as a result slowed up its supply. Some of the demand has been diverted now to poultry and fish, prices of which have risen about 50 per cent over pre-war.

Present price ceiling thinking seems to reflect a scorn for "automatic" factors in our economic processes; seems to rest on a dogma that the economic structure is what it is solely because of what it was yesterday, and can be changed in any direction by man-made fiat. We must agree, of course, that yesterday our ways of living were partly due to what they were the day before, but they were partly due, also, to some automatic relationships.

We need to get down to a few simple fundamentals. After all, demand and supply and price and quantity of the purchasing tool are automatically interconnected; probably inextricably so. When we modify one of them, we change the others, too. In trying to disconnect them, we are undertaking to govern predictably the infinite acts of men by separate edicts.

The prospective results of the Henderson plan of price control would be clear either from a study of demand and supply economics, or from a reading of history. In Revolutionary War days a price convention, held at Providence, fixed the prices at which imported goods might be sold. The result was to discourage importation. Even more impressive and to the point is the experience that followed a few years later in Europe. After the French Revolution, rising prices of necessities led to laws making further price rises in necessities illegal. The effect, as J. E. Gillespie reports in his *History of Europe, 1500-1815*, was "that shops were closed and trade stopped, while the farmers kept back their grain. . . ."

Price-fixing for plenty

WE DO not imply that price control is impossible, or impractical. But the automatic features of our economic order do give basis for predicting that the present type of regulation will lead to scarcities and that the patchwork remedies so far instituted are futile.

If we weigh the results of the two types of price control—that of the French Commune (which is the present plan) and that of the First World War; and if we apply supply and demand reasoning, we may be able to devise a workable program which:

1. Will keep the supplies of necessities abundant.
2. Will keep their prices as low as is consistent with the objective of plenty.

In this connection we must remember, of course, that a large proportion of our production facilities must be used for turning out implements of war. Non-necessities must be given up. Our job is to keep necessities abundant.

Our problem is one of alternatives; we cannot retain everything. We can have bread, butter, bullets, and bombers, in abundance, if we give up some of the

modern-life trimmings. We can have meat—all we want of it; and steel—all we need of it. But to have meat and heat and steel we must go without something. America has been on luxury standards so long that what items are necessary for subsistence or for efficiency are apparently not easy to judge. We might learn something about what necessities are from our enemies.

In coming to constructive suggestions, we may find a hint in one of the intelligence tests that have been devised for monkeys. A banana is placed on the floor outside the monkey cage on the far side of an angled barrier. The monkey is given a stick.

If one side of the angled barrier is about parallel with the front of the cage almost any monkey knows enough to poke the banana along till it clears the barrier, and then ease it to a position where he can reach it.

Indirect methods work best

BUT, if the barrier is placed in such a way that the monkey must push the banana somewhat farther away before he draws it toward him, he may not see the solution. The monkey that can solve the problem when the barrier requires him to push the food almost directly away from where he wants it, is a monkey with unusual reasoning ability. This example is intended to illustrate that an indirect method is often more effective than a direct method. If we want the price of bread kept low—but at the same time *want to get bread*, then we would do well to avoid putting our control directly on the bread.

That does not mean that our program must be complex, that our points of pressure must be numerous. Workable solutions are usually simple, and they usually have a large element of the automatic in them.

One principle must be central: the less the interference with, and the more the dependence on, automatic influences, the more likely our regulations are to work.

If rigid ceiling prices were maintained on those things that are not needed in the war, while freely moving, competitive prices were permitted in the necessities, the result would be a sufficient rise of prices in the necessities to assure their abundance. In that very process, workers and materials would be diverted from the production of the non-necessities, since their producers could not stand the competition in costs. Prices of necessities would not rise much because man-power and raw materials would find an advantage in shifting from the non-essentials to the essentials in response to small price rises for the essentials.

That is the framework of a price control system that both history and demand-and-supply economics would support. It is indirect, to be sure; but the monkey would get his banana.

In necessities in which competition is absent or nearly absent, a regulation of price in relation to costs would be an appropriate supplement. However, for most of the necessities, competition would be an ample control—and we would *get the goods*.

HELPING BURROUGHS USERS MEET TODAY'S PROBLEMS WITH THEIR PRESENT EQUIPMENT

IDEAS

... that are helping to solve wartime accounting problems

IDEA

Eliminate any unnecessary checking or proving; eliminate superfluous information on reports, as well as reports that are no longer essential.

IDEA

Obtain as a by-product of regular routines such vital reports as Labor Distribution by Accounts, Materials Used, Taxes Collected from Employees, War Bond Purchases by Employees.

IDEA

Combine or redesign forms so that related records—such as pay check, voucher, earnings record and payroll—can be posted together in one operation.

IDEA

Keep machines busy by relieving skilled operators of pre-listing, stuffing, heading accounts and other non-posting duties, and by scheduling relief operators for lunch hours, rest periods, etc.

IDEA

Make sure that operators are taking full advantage of figuring short-cuts, and that they are using all the time-saving features of their machines.

IDEA

Locate and eliminate causes of bottlenecks or idle machine minutes by rearranging machines, duties or the flow of work to the machines.

IDEA

Keep machines in the best possible condition through regular inspection, cleaning, lubrication and adjustment by Burroughs service men.

★★★ MANUFACTURING FOR WAR

Manufacture of aircraft equipment for the Army Air Forces and Burroughs figuring equipment for the Army, Navy, U.S. Government and the nation's many war activities is the vital task assigned to Burroughs in the Victory Program.

Burroughs' technical knowledge of machines, applications and procedures can be of great help to you in meeting today's accounting problems with your present equipment. Call your local Burroughs office, or write direct to—

BURROUGHS ADDING MACHINE CO.
DETROIT, MICHIGAN

Burroughs

★ FOR VICTORY—BUY UNITED STATES WAR BONDS AND STAMPS ★

Planning Hits the Black Hills

(Continued from page 24)

The miners I talked with pointed out there are less than 2,500 bona fide hard rock men in the U. S. gold mining industry. The first month's placement figures show that less than half have reported for new work after being laid off (precisely, 38 per cent of them).

On that basis, it develops that former gold miners who will actually go into copper production will increase U. S. copper output by 43,750 tons annually. That isn't much even in comparison with the 1941 production of 966,072 tons. (The 1942 production figures are secret, but production has been stepped up.) These figures are based on the average production of all U. S. copper miners, according to U. S. Bureau of Mines totals. Actually, the displaced gold miners will contribute less than 43,750 tons, because of unfamiliarity with copper techniques, and because some of them will go to other metals besides copper.

Economic life disrupted

THE general complaint in Lead and Deadwood that probable increases in the war effort did not justify the virtual disruption of economic life in a solid, prosperous four-state area where Homestake wages and dividends are vital seems valid.

There was also widespread criticism of what the man-in-the-street called failure to tap other possible sources of mine labor before turning the heat on gold mining. Black Hills citizens regarded Henry J. Kaiser's success in finding labor in New York for his Portland, Ore., shipyards as an indication that the mine closure might have been avoided by closer check on labor sources elsewhere.

These were general complaints. The other angles of dissatisfaction can be most easily catalogued in three groups:

1. The effect on the individual workman.
2. The effect on the community.
3. The problems of mine management created by the order.

Individual problems account in some measure for the reluctance to accept employment in the other mines.

In the first place, of the roughly 2,000 men on Homestake's pay roll, only 800-plus worked below the surface. The remaining 1,200 were refinery help, maintenance men, foundrymen and skilled and unskilled workers employed above ground.

Admittedly the 800 below-ground workers could be absorbed instantly in the critical metals mines. To force those 800 into the non-ferrous diggings, the working lives of 1,200 others were jeopardized. It is true that the U.S.E.S. staff, headed by Ned McDonald of the Minneapolis district office, made sincere and often successful efforts to place non-miners in essential war work. However, the fact that only 41 had been placed in essential work in the month after the closure does not argue a hopeful immediate future for the non-miners.

Many of the processes in the recovery of gold from low-grade ores are highly specialized—for instance, cyanide plant operators—and limited solely to gold production. Workmen trained and skilled in these unique accomplishments can find little other outlet for their talents.

This seems destined to be one of the biggest headaches in manpower allocation. It is easily conceivable that taking a few skilled men from a complex plant could throw dozens with unwanted skills out of work.

Again, the worker must deal with the problem of fixed debts. The moratorium on debt which is given to soldiers does not apply to workmen displaced by federal order. Inevitably, this oversight hits the most stable elements among the worker group hardest.

Those employees who were buying homes on a monthly-payment basis faced the necessity of paying rent at their new locations and at the same

time meeting payments on their property in Lead.

Even if the wages received in the new job equal the Homestake wages—in many instances they don't—this double expenditure cuts the worker's actual return for his labor. The only other alternative is to sacrifice his equity.

Likewise, workers who already own their homes have no hope of renting their property while they are away. The closure shot the realty market in Lead and Deadwood full of holes. The boarded-up house is the symbol of the labor allocation plan in Lead and Deadwood.

The problem of union affiliation is also vexing.

The Homestake is the largest non-union mining operation in the country. The management and the workers long ago evolved a working system of "social gains." Employees have had free hospital and medical care for themselves and their families for years. The schools in the district have been maintained at exceptionally high standards for years because of outright building and operational subsidies given by the company. Many of the churches depend heavily on

BELLRINGERS



N. C. STATE NEWS BUREAU

Charcoal+Ingenuity=No Ration Worries

A novelty in U. S. industrial life—a charcoal-burning truck—is being used with success by the Champion Paper & Fibre Company of Canton, N. C. Facing the fact that its heavy-duty trucks must haul timber from forests far from railroads, come what may in gas or tire rationing.

The first charcoal burner—made mostly of salvaged metals—cost \$500 on a one-and-a-half-ton truck. Lessons learned made subsequent installations cheaper. Three vehicles now equipped to burn charcoal attain a maximum speed of 45 m. p. h. and "pull like nobody's business." Quart of gasoline warms up the motors, then charcoal does the work.

A BOY COMES HOME

REMEMBER how he used to come home?

There'd be the slam of a car door in the dusk. "So long, Joe, see you tomorrow." Then the swift, light footfalls brushing the leaves on the walk, the thud as 160 pounds of wiry muscle hit the porch in an easy bound that ignored the existence of steps . . . the crash of the front door, rattling every picture in the house, and the newly baritone voice calling, "Hey, Mom, when do we eat?"

Remember?

Now, a Marine flyer, he comes thundering in to Guadalcanal in the last light, the wind howling through the new hole in the fuselage where a chunk of shell just missed. The bomb racks are empty and, miles away on the darkening water, a Jap officer volleys desperate orders from the bridge of a destroyer that will never see Yokohama again.

Below, as his plane circles, American guns are still pounding away, winking and flashing in the twilight. On the flying field the crawling tractors and their sweaty drivers are at their endless task, filling fresh shell holes and bomb craters, making a safe surface for him. Back and forth the tractors go, up and down, looking from this height like friendly beetles, each rolling a ball of earth ahead of it. He is conscious of relief. That strip hadn't looked too good when he took off.

He loses altitude now, the ground comes up with a rush and the wheels touch and cling. He climbs stiffly down and a voice says from the gloom, "You're late, pal. Nothing minor, I hope?" He grins. Bill must have waited around, the worry-wart. What he says is, "Okay, here. Did you wolves by some mischance leave anything to eat?"

He's back at his home port again—and safe!

★ ★ ★

To make his homecoming safe, the rugged International Tractors which the Marines took to Guadalcanal have worked unceasingly throughout that wild fight. Under every adverse condition, the tractors have kept going, their performance a tribute to the determined men and women who built them.

We take it to be our job, and the only job of the many machines and weapons we make for Army, Navy, and Marines, to do our best to see that every American fighting man comes home—AND COMES VICTORIOUS.

INTERNATIONAL HARVESTER COMPANY

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MORE
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company contributions, regularly made to all faiths. Their safety, recreational and educational programs pioneered their fields.

Proof that the system works is the fact that more than 600 workers belong to the Homestake Veterans' Association for which 21 years of service in the mine is an eligibility requirement.

I talked with "Billy" Lang, at 85, the oldest Homestake employee both in age and length of service—he's worked there steadily for 61 years.

Asked what he thought of the order, Billy pondered a moment and then said: "Well, it looks as if I should have listened to my Dad. He always said this job would only be temporary."

These men, certainly the most satisfied group I have encountered anywhere, have been told by the Army's Service of Supply that they are in truth soldiers—soldiers in critical production.

However, not a few of them commented that their status as production soldiers did not exempt them from joining a union. The copper mines are completely unionized. Before a man leaves Lead and Deadwood at Government insistence, he understands that he must join the union in his new job.

That has caused resentment.

"There'd be a hell of a squawk if every soldier drafted had to pay an initiation fee to a signal corps organizer, or a tank battalion union delegate before he could get in and fight for Uncle Sam," one miner told me. "This doesn't make any more sense. If we were quitting Homestake and going to Butte because we

wanted to, it'd be different, but we go because we have to and still we're stuck with the union."

Not a few of the miners were worried about the treatment they might receive in the copper mines.

These are problems of individuals. The effect on the Lead-Deadwood community itself is also definitely adverse. Business and professional men agree that the blackout order will make the depression look like a picnic.

R. E. Driscoll, president of the First National Bank of the Black Hills, in Rapid City, 45 miles away, perhaps can qualify as an expert analyst of Black Hills business. His bank has branches in most of the area's principal cities.

"Few people in the Black Hills will escape the effect of closing the mines," Driscoll was quoted. "It is hard to predict the extent of the Government's action, and it is equally difficult, in the light of what the Government hopes to gain, to see the wisdom of it, even granting the unimportance of group economy."

"The effect on the whole Black Hills will be greater than most persons realize. Not only Lead and Deadwood will be affected. Rapid City is the jobbing center for a wide area. Suspension of gold mining will eliminate 30 per cent of the trade population of the Black Hills area."

"The state will also have a major problem in its lap. The loss of \$1,200,000 annually in direct gold mine taxes (roughly 20 per cent of South Dakota's income) in addition to the sharp drop in revenues from gasoline, automobile

license and sales taxes must be faced.

"In addition to \$5,000,000 paid annually in wages, and large sums spent locally for supplies, the district will lose an estimated \$1,800,000 annual revenue from the approximately 400,000 Homestake shares owned by Black Hills residents."

C. A. Quarnberg, president of the Greater South Dakota Association, said he "considered the shutdown a near-calamity to the state as a whole."

Supt. R. V. Hunkins of the Lead public schools feared the effect on educational standards. Approximately 65 per cent of school income comes from gold mine taxes.

The stable element suffers

WITH business as with individuals it is the most stable element which stands to lose the most. The marginal operators and the parasite segment can leave.

For established enterprises, with long-term commitments, it isn't so easy.

The shutdown fiat handed the mine executives plenty of managerial headaches, too. Mr. Bjorge outlined some of them, most of them anticipated when he testified at the hearing held in Washington when the gold mine shutdown was first broached.

The Homestake company has attempted to get authorization to convert their operations to include recovery of metals and chemicals necessary to the war effort. The nature of the vital materials Homestake can produce in quantity cannot be disclosed, but they were ready to go into production, sought the authority to convert, and got nowhere.

Mr. Bjorge is naturally concerned at the prospect of scattering the employee organization so laboriously built up to its present efficiency and harmony. The investment in time and money necessary to train key men will be largely dissipated when the order is fully effective and the personnel is dispersed.

The shutdown order does permit retention of a maintenance crew. For this job Homestake is trying to retain men longest in their employ, and at the same time leaven this older group with outstanding younger men, whose vigor and drive will be needed when operations resume.

The Homestake chief also pointed out that the dispersal of a functioning organization may have an adverse effect on war metals production, instead of increasing it. Homestake has been asked to take over a Wyoming project on a management fee basis. It's a hard rock job right up Homestake's alley. It's an entirely new development, and it would be necessary to start from scratch to get the operation going.

With its organization intact, Homestake could jump right in. With the organization broken up it's anybody's guess. If a crisis develops in the Wyoming metal, the failure to have adequate supplies may be traced to the dispersal of Homestake's workers.

In short, this U. S. experiment in manpower allocation demonstrates that the plan must be more carefully conceived and carried out than was done in the case of gold mining.

An Invitation to a MACHINERY MANUFACTURER or INVENTOR to plan with us NOW for an enlarged business AFTER THE WAR

We are one of the leading makers of machinery in our field. Our wrapping machines are now used by hundreds of concerns—in the food, drug, candy, tobacco, dairy fields, etc. Our plant is modern, and is manned by skilled craftsmen. Our engineering and designing staffs have first rate inventive ability and have been responsible for many outstanding improvements now widely used by the package goods industry. And our current designing work for the war effort comprises such new developments as a cartridge clip loading machine, a new Navy lamp, a gun sight and a designing assignment for a large steel company.

Being heavily engaged in war work—both designing and manufacturing—we have greatly enlarged our facilities. Consequently, we will be in a position to build a larger line of machinery when the war ends. In preparation for this, we are now working on ideas for expanding our

regular line of machines. But we want to do more.

We are thinking of adding other lines of machines used by industries we do not now serve.

● You may have ideas for new machinery which need development. We'll be glad to discuss them with you, and if mutually satisfactory, will develop them with you.

● You may have a machine or machines which you have been making in your own plant, but which you could make with greater profit in ours.

Our final arrangement may result in your coming into our company—or it may be worked out on some other desirable basis.

If you feel you have something on which we might work together, we suggest that you communicate with us, giving full particulars. We can then arrange for a meeting.

PACKAGE MACHINERY COMPANY, Springfield, Mass.

FROM STREAMLINERS TO SHIPS



The building of one of these patrol boats consumes as many man-hours as the construction of a 14-car streamliner

THANKS TO THE WORKERS OF PULLMAN-STANDARD WHO TAKE IT IN THEIR STRIDE

WHEN Pullman-Standard started to build patrol craft, it entered another entirely new field. New problems had to be solved by applying known techniques and methods—workers were trained in adapting to shipbuilding, trades and skills employed in the building of the world's crack trains. And so, carbuilders became shipwrights, and, with the 82 years of know-how that built streamliners, passenger and freight cars, the shipbuilding program was launched.

The Watchword: Speed and More Speed

Since Pearl Harbor the men and women of Pullman-Standard have set a remarkable record of armament production. Speed and more speed has been achieved in all 8 plants where, as in the two expansions now building, the Company is confident that they will raise their sights even higher to better their present fine records of accomplishment.

Pullman-Standard, in co-operation with 984 sub-contractors, is producing huge quantities of:

**TANKS • HOWITZER CARRIAGES
TRENCH MORTARS • BOMBS
SHELLS OF VARIOUS CALIBERS AND TYPES
PARTS FOR ANTI-AIRCRAFT GUN MOUNTS
AIRCRAFT MAJOR SUB-ASSEMBLIES
NAVAL VESSELS • FREIGHT CARS
FOR THE ARMY, NAVY, AND RAILROADS**

The workers may well be proud of this record—proud, too, of the 2,000 members of the Pullman-Standard family in the armed forces, and of the thousands of sons and daughters also serving.

Almost 2,000 Suggestion Awards Made

In the last 12 months workers have received almost 2,000 awards for suggestions which have helped increase produc-

tion, conserve materials, improve products and reduce accident hazards. Their remarkable safety record together with the high level of physical fitness, plays an important part in maintaining production schedules that will insure ultimate victory and the American Way of Life.

Congratulations are due those men and women who by their purchases of war bonds and stamps have earned the award of the Treasury Department's Minute Man flag.

To all Pullman-Standard's men and women in the armed forces and plants, to the firms with whom we have placed 5,500 sub-contracts, and to the Army and Navy officers for their fine co-operation, we say "Thank You" sincerely.

C. A. Liddle
PRESIDENT

Pullman-Standard Car Manufacturing Company

Pullman-Standard's armament production IN 1942 WAS NEARLY 5 TIMES AS GREAT AS IN 1941



Tanks whose maneuverability, greater speed and heavier firing power amaze and spell defeat for the Axis on many fronts.



Trench Mortars to lob bad news to our enemies and clear the way for advances on many widely dispersed battle fronts.



Aircraft Major Sub-Assemblies for our transport planes that are carrying supplies and men to the battle fronts overseas.



Howitzer Carriages mounting the big guns to blast the enemy out of his entrenched positions wherever we find him.



Freight Cars in foreign service to haul supplies for our Army and Navy to our far-flung battle fronts in many lands.



Shells and Bombs: Vast quantities of these messages to the axis are being shipped to our fighting fronts everywhere.

PULLMAN-STANDARD CAR MANUFACTURING COMPANY
Chicago, Illinois... Offices in seven cities... Manufacturing plants in six cities

© 1942, P. S. C. M. CO.

Hail to the Split Second

(Continued from page 42)

sideration to seaworthiness and stability, but the prime consideration is the order of unloading. If a tank must be taken on shore first, in the teeth of the enemy, then the tanks ride on the decks and to hell with stability.

The first cargo vessels to sail from the West Coast for Australia wobbled out of port as lopsided as haystacks in a storm. The longshoremen grieved mightily. Harry Bridges, longshore boss, threatened to come to Washington to complain. But those cargoes were needed in Australia in a hurry. Later the longshoremen got the idea. The items to be unloaded last went first into the ships. Those subject to first call went in last. Army and longshoremen got together on loading for stability plus convenience. But the split second had had its way.

War production line

THE ships had been called to the ports on a precise schedule. Whenever possible, no great gathering of ships hung around in the roadsteads. They arrived by ones and twos and were tied up at the docks. As one crew of longshoremen ripped their cargoes out, another crew was filling the holds of the ship on the next pier. Trains pulled alongside wherever that was possible and the cars were loaded direct from the ships. The

docks were stripped clean as the stuff came out of the ships. Oil lighters lay alongside to pump their tanks full. A loaded ship was yanked out of her berth and a ship edged in to her vacated place.

Convoys were assembled for the Navy's guardianship. The slow ships puffed toward an ordained rendezvous in mid-ocean where the fast ships could catch up with them. The ship-loading was governed by ship speed, as far as possible. Across the continent, freight trains were high-balling for the dock-ports, given right of way over everything but troop trains. Great fleets of trucks ran night and day over the highways. Each had been given a precise time of arrival. Each train and each ship was loaded as a complete unit.

In First War days one ship might be laden entirely with unrelated articles. If the ships with the firing pins or the shells or the gasoline were wrecked or delayed, piers were jammed with useless and immovable items. In the Second War, each gun has its complement of men and its shells and its provisions. It rumbles off the pier ready to go into action. No delays. The lesson of the split second of the assembly line has been well learned.

For 20-odd years the Army had been working out the plans for just such an operation, in collaboration with American railroad men and the communica-

tions companies. The Comptroller-General's Office played its part. The law requires that certain formalities be observed in military operations. They involve letter-writing and initialling and the layering of advices and consents. All that was thrown aside. The Army communicated by teletype and telephone with the heads of the American Railroad Association in Chicago and key cities and with its own depots and warehouses.

An order of firing pins might get under way in Oskaloosa, be whipped into a train at Des Moines, and be sieved out at a port into a dozen ships without pausing long enough at any point for a loader to eat a sandwich. Industry had done its part in making the items, packaging them according to Army instructions and slapping them on a train at the moment directed. No doubt there were slip-ups here and there. No man or organization is infallible. But the 700,000 items and the 140,000 men—more or less—got to the African coast at just the time ordered.

Grandma would understand

A COMPARISON might be offered.

If a modern housewife plans a party she need only send out the invitations, telephone the grocery and tell the maid to make certain that her white apron is clean. But, 150 years ago, a pioneer housewife might have found it necessary to set the date weeks ahead, so her guests could come by wagon and saddle horse. She might have had to try out tallow for the candles, then perhaps weave the yarn for her linsey-woolsey dress from the wool of the sheep her men had shorn. The sugar would be a holdover from last spring and the meat might be a pig from the farm or venison from the woods nearby. Soap for the toilet of the guests might be a product of the ash hopper and odds and ends from the kitchen. And any night flaming arrows might have fallen on the roof. She would have a feeling for the Army in its job of 1942.

The Army, of course, had certain advantages. It had authority. Only the other day the Army notified truck owners that, if it needed trucks, it would take trucks. In 27 months it spent \$23,372,000,000. In that total a considerable portion of the lend-lease's \$4,098,000,000 is included. The lend-lease costs have not been reported separately since the end of June. It is not possible to say precisely what part of the Government commitments of \$13,474,000,000 for war plant expansion is to be charged to the Army, nor what share of the \$3,444,000,000 private commitments for war plant expansion. Above everything else the Army knew the value of the American split second, on which is based the American assembly line.

What has been done in the Pacific and in Africa could not have been done any other way. Good old American split second! If you feel very scholarly you may put the professors' name to this business of manufacturing and transporting in absolute split-second order the 700,000 items multiplied by innumerable articles and the men and food. The professors call it logistics.

Studebaker

EXPEDITES ENGINE-OUTPUT
FOR FLYING FORTRESSES
WITH

KARDEX MATERIALS CONTROL



BOEING—WRIGHT—STUDEBAKER...ALL USE KARDEX BUILDING B-17's

68% OF ARMY-NAVY
"E" WINNERS USE
KARDEX PRODUCTION CONTROLS

REMINGTON RAND INC.

KARDEX
visible systems of
ADMINISTRATIVE
CONTROL

A Plan to Make Industry Over

(Continued from page 26)

Moreover, British experience demonstrates need for full cooperation between plants and industries which could not be had here without suspension of the anti-trust laws. We could not concentrate one industry and leave its competitors free to seize the market. Concentration, to succeed, must be worked out on vertical lines also, so that the whole producing structure, from raw materials to distribution, is made to work together.

Next question is: *What Happens to Labor?*

In Deadwood, S. D., discussed elsewhere in this issue, we see one effect which concentration will repeat many times as going plants are stopped by cutting off the flow of materials, workers are uprooted and transplanted to crowded centers of production.

Concentration has profound effects upon labor, if we may judge from the British experiment. The number of workers seemingly released is not a net gain. If industry had been allowed to adjust itself as it had always done before, a large part of the necessary shifting would have taken place without benefit of outside direction.

Concentration in England brought some loss in efficiency. When it was ru-

mored that an industry was to be concentrated, the workers became anxious, fearful, and restless. The men began to drift. They tried to find more stable employment. Thus, even if concentration did not actually follow, the industry found itself short of labor.

One of the most serious threats of concentration in this country is its impact upon the stability of labor in our social structure and economy. One government official scorned this view, while another accepted it, saying that the stability of living conditions for our people is one of the most important considerations before we begin to concentrate.

Equally interesting is what happens when an industry is restricted. What happens to the good will it has built up? What becomes of the trade-marks, slogans, catch-words, brands, trade secrets, and patented processes?

In the beginning, the British Government was most sanguine about all this. The going plants were to distribute their profits over the entire industry, by way of dividends. All plants and assets in the industry were to be maintained in good order, so they could be put back into business after the emergency.

Few of these expectations will be realized, and thick gloom has settled over

the industries already concentrated. If only one concentration had been imposed, it is doubtful if the hopes first expressed could have been made good. But second concentrations have followed in some industries, compounding the original problem of unscrambling the individual assets in the snarled situation.

Cold analysis of the British situation indicates that the suppressed plants will never get back into business.

This may not be as serious in England as it would be here. There it may not be as certain that export business can be resumed in pre-war volume very soon. Perhaps it can. We have no desire to pirate the export market while Britain is in difficulties. But we are certain that we will do more business after the war than we have ever done before. The entire world must be brought up to date after this pagan interlude. The war has introduced new machinery, new processes, new conveniences, new freedoms, new refinements, new standards of living, new estimates of national security upon many nations. After the war they will want the things that we have.

England gets a jolt

IN THIS country alone we have a vast catching-up problem. Many people are getting higher wages, and buying more comforts, than they ever had before. They will not give them up after the war. Our plants must be ready to resume peace-time production, not in pre-war volume, but in much larger, post-war volume. They say we must build 1,000,000 houses a year for many years to catch up, even if all the displaced workers return to their former places. If they remain in the crowded places we will need still more houses.

Now, if we concentrate industry, what provision is to be built into the plan to enable industries to come out of the war with speedy reconversion to tackle this huge job of making more things in a hurry? What elasticity is to be wrought into the sinews of the plan?

England has had one jolt already. The cotton industry was concentrated. Its activity was severely curtailed. The workers were all "concentrated," that is, they left. They were highly specialized workers, knowing nothing about other trades. They were the product of tradition; of long, family-trained precedent. Suddenly a new, demanding war need arose for a cotton article. It must be produced in a hurry. There was a scramble to rebuild the industry to its former status and gear it to the war need. Only after a long time were they able to find the skilled workmen and get them back to their looms.

No doubt current reports of the working of the British experiment leave many spaces not filled in. Altogether too little is known about it. Certainly not enough to warrant trying it here.

Whatever we think of it, we are told that it was formed of stern necessity, and molded to British conditions. Any plan which is proposed for restricting American industry in this way should be born of equally compelling necessity, and expertly fitted to conditions in America.



"It's something our agents smuggled out of West Point"

Congress Comes Out Fighting

(Continued from page 19)

The S.E.C., the A.A.A., and other agencies have become affixed to our economy. Little will happen to them.

This does not mean that the anticipated fireworks will not develop. They will, as Congress fights to regain the power it has lost to the greatest bureaucracy this country has ever known. The evidence indicates that this bureaucracy is now preparing to fight for its life. In many respects it has the advantage.

Will take initiative

IN the first place, it needs to ask Congress for no more power. It is content with the power it has or has assumed. Congress, if it is to regain its influence, must take the initiative. It can't be content with investigating bureaucracy and making recommendations which the bureaucrats ignore. To become the master, it must work itself back into a position so strong that the Executive branch will not dare adopt a policy which Congress is known to disapprove, as has frequently been the case in recent years. A notable example is the presidential decree fixing a \$25,000 a year ceiling on incomes after Congress had expressly refused legislation to this end. Similarly, the administration of farm price legislation is directly contrary to what a

majority of the Congress intended.

In former years the thousands of employees in the executive branch were obligated to a Senator or Representative. He got them their jobs. Bureau heads and Supreme Court members were recommended by Congress. The President named his Cabinet, but even there the Senate kept the whip hand, through its power to confirm.

But, since 1933, the bureaucracy of Congress' own creation has run completely around it. Congress isn't consulted about its policies, its personnel. Only the most naive person seeking a job, or an influential appointment in Washington went to see his congressman. The vast army of federal employees—2,500,000 now by some estimates—owe their appointment—or the vast majority of them do—to the President or to a bureaucrat. They feel no obligation to Congress.

Members of the executive branch used to shape their whole conduct with a view to answering to a congressional committee. Recently many of them have shown downright contempt for the committees; some of them won headlines for bawling a committee out, or "putting it in its place." In the general congressional bewilderment, the Senate has, on one or two occasions, sought to get a hold on the bureaucrats by extending its

confirmatory power to those additional thousands receiving \$4,500 a year and up. Jealousy of the House and propaganda by the bureaucrats checked that.

So it will be seen that the revitalized Congress has got to beat back slowly to regain its influence. It has to beat back along the road of practical politics of which the people as a whole are not fully informed, and are therefore easy victims of the bureaucrats' vast propaganda machine.

Propaganda at work

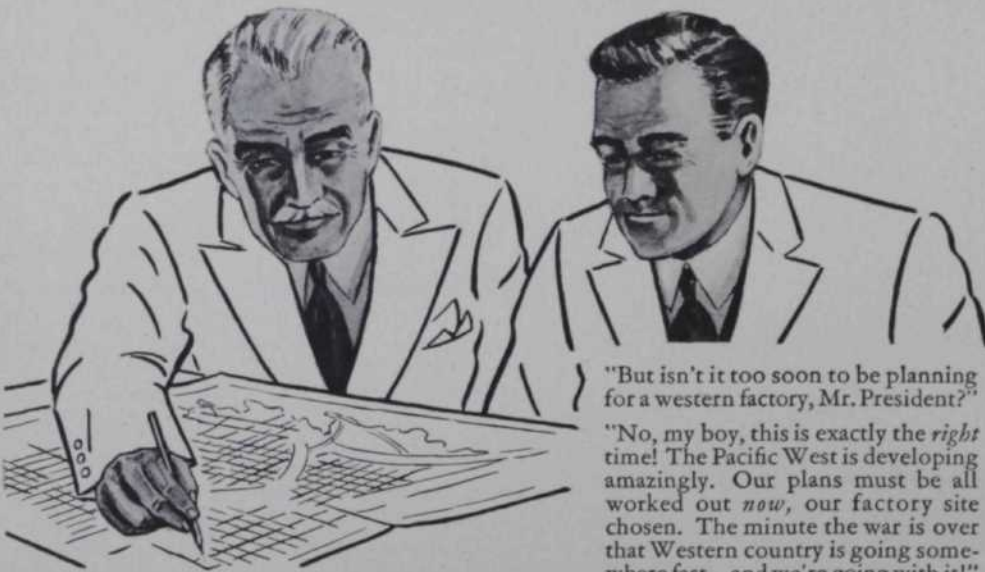
THIS was illustrated several months ago when the House sought to check Leon Henderson's requested appropriation of around \$165,000,000 for a bureaucracy of 102,000 persons. When the House reduced the appropriation to less than \$100,000,000 it took a terrible editorial licking worked up by the government propagandists. Henderson was "trying to do something about inflation" and the congressmen were trying to hamstring him, the editorial chorus ran. Nobody apparently bothered to ascertain that Henderson's proposed set-up called for another organization dealing with foreign commerce and statistics, fields in which at least five other agencies were already active. Everyone seemed to accept the argument that members of Congress were mad at Henderson because he had ignored them in patronage.

So bureaucracy apparently has the advantage in weight of numbers and in propaganda. Just what strategies can Congress employ and what weapons can it mobilize to carry them out? Among the best is a plan already afoot to rescind all unexpended appropriations and make the bureaucrats again justify them. This is important because they have unexpended appropriations running into the years ahead and totalling some \$100,000,000,000. The essence of Congress' power is control of the purse strings. It has virtually lost this control and must regain it. There is no disposition anywhere, apparently, to stint on funds necessary for the conduct of the war. But recent appropriations have been so lavish and so loose that the bureaucrats, by switching funds from one appropriation to another, have been able to finance projects and carry out policies specifically disapproved by Congress. It is apparent that the new Congress will try to find out where the money is going. One way to do this is to make the bureaucrats come back to Congress more frequently for funds.

Another movement already launched envisions a joint congressional committee to sit in with the Administration the conduct of the war. This committee made up equally from both Democrats and Republicans, would handle no military matters. It would, however, investigate the soundness of the thousand and one collateral matters relating to the war, such as the operations of the Board of Economic Warfare.

The extent to which the President falls in with this plan will very likely indicate the relations between the executive and legislative branches in the next year. Many of his New Deal advisers have been arguing strongly against it, how-

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"THAT'S our spot, Tom!"

"Those other Metropolitan Oakland Area locations are good, but this is *ours* from every angle you look at it."

"But isn't it too soon to be planning for a western factory, Mr. President?"

"No, my boy, this is exactly the *right* time! The Pacific West is developing amazingly. Our plans must be all worked out *now*, our factory site chosen. The minute the war is over that Western country is going somewhere fast...and we're going with it!"

A FORWARD-SURGING WEST rapidly becoming independent of the East industrially...rich markets expanding by the million every year...big reservoirs of skilled labor...enormous supplies of raw materials and power..

With Metropolitan Oakland Area in the most advantageous location for manufacturing and low-cost distribution to the Eleven Western States

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ever. Indeed, they have been seeking to convince Mr. Roosevelt that he should take the attitude that the elections, in themselves, show that the people do not have confidence in Congress and that he must give them an even stronger shoulder upon which to lean. If he should accept this advice, predictions are that there will be a clash between the two branches of Government which will reach the Supreme Court.

There will also be a definite move to reduce the Government's civilian personnel. This will probably turn on a resolution to be introduced by one of the new Senators calling for a horizontal reduction of 50 per cent. Such a resolution, passed by both houses, would serve as a guide to the appropriating committees which would give it teeth. Many competent authorities declare that a 50 per cent reduction in civilian personnel would greatly improve the conduct of the war. The expiring Congress had already made gestures toward a more unified war set up. The new Congress is expected to accomplish something.

An urgent need is that Congress develop some opposition leaders, men who will command respect and be able to hold their own in the propaganda battle of Washington, men who will command equal headline space with the big names of the executive branch.

Congress has been subordinated by the executive branch before, but Congress has always managed to whittle its way back to power. For the next two years, at least, the whittling is going to be difficult, because there is so much more to whittle away.



*A calm voice
amid chaos...*

Friends' Lives are in My Hands

(Continued from page 22)

that we'd have to be separated for the year of training. It's more necessary now than when we got married."

So they quietly make their plans according to their circumstances and part—until the war is won!

It would be impossible to serve on a draft board that decides the fate of other people without making some enemies. I know that at various times a lot of people have been mad at me. A man who puts personal popularity above his duty, or a man who ever expects to run for public office, has no business serving on a draft board.

I have been in business a long time. I have always based my bid for trade on the premise that every buyer should be treated the same. Occasionally a customer who couldn't make his money buy special values in my store has quit me for a time. Likewise, draft registrants who want preferred treatment sometimes dwell publicly upon the darker side of my character. But, once they make up their minds to do their part as good Americans, these neighbors usually forget their chagrin and accept me again for just what I am: a very ordinary human being who makes mistakes while trying to do the best he can.

IN TODAY'S seething, uncertain world, there's nothing more touching and beautiful than a trustful little child at prayer. But the calm voice of common sense tells us the passive hope that everything will somehow turn out well, is not enough.

Sudden automobile accidents occur—devastating fires break out—industrial mishaps strike unexpectedly—all can bring crushing financial loss.

And it isn't always enough to be "insured"—it's the way you're insured that really counts.

Do you know what it is to have Hardware Mutuals *policy back of the policy* protecting you? It means more than financial reimbursement—it's a way of doing business

in which, for more than a quarter century, your interest has always been the first consideration.

This policy back of the policy stems straight from sound, conservative management—direct dealing with you through full-time representatives—scrupulous selection of risks—and the return of resultant dividend savings to policyholders. These dividend savings have totaled more than \$76,000,000.00 to date.

Write for our free booklet, "Reducing Your Expenses," which gives you full information. Licensed in every state. Offices in principal cities.

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Mutual Implement and Hardware Insurance Company, Home Office, Owatonna, Minnesota
HARDWARE MUTUAL CASUALTY COMPANY
Home Office, Stevens Point, Wisconsin



Hardware Mutuals

Stevens Point, Wis. ★ Owatonna, Minn.

Compensation, Automobile and other lines of

CASUALTY AND FIRE INSURANCE



for Outstanding WAR PRODUCTION

E-flags already are flying over many plants on Missouri Pacific rails. The will to work and win, backed by abundant raw materials, fuel, power, skilled labor and dependable transportation has transformed the Central West and Southwest, served by Missouri Pacific Lines, into an arsenal for America.

There's ample space and opportunity here for immediate and future plant expansions, and Missouri Pacific's Industrial Engineers and Technologists will be glad to furnish comprehensive surveys of available industrial sites. For prompt attention, write or wire

J. G. CARLISLE
Director,
Industrial Development
1710 Missouri Pacific Bldg.
ST. LOUIS, MO.

**MISSOURI
PACIFIC
LINES**

Civilian Health is a Weapon

(Continued from page 30)

curement and Assignment Service of the War Manpower Commission. "The only thing we have to worry about is distribution.

"War industries have brought people into greater concentrations, but not doctors. Some re-distribution may be necessary. We have plenty in the big cities, but we may need them in the sticks."

Dr. C. D. Selby, medical director of General Motors Corporation, is chairman of the procurement and assignment committee on industrial health. He has the close cooperation of the American Medical Association. The entire program is voluntary.

Most war-time health hazards are peace-time hazards intensified. Observations made in the past year lead authorities to put these possibilities on the watch list:

Solvents—Toluol is going into TNT, and toxic solvents often are substituted.

Enclosure of the process and exhaust ventilation are recommended.

Abrasives—Silica sand used in place of steel grits in blasting, silicon carbide for steel cutting tools, abrasive grinding processes instead of milling, all increase dust hazards.

Blasting workers should be protected by helmets supplied with at least six cubic feet of dust-free air per minute. Excess dust in other operations should be drawn off by ventilators.

Cutting oils—Increased use and substitutions often produce skin irritations, sometimes poisoning.

Each case should be inspected by a physician, who may recommend use of cream or transfer of worker.

X-ray—Use of X-ray under high amperage to detect flaws in metal castings and forgings, over long work periods, may subject operators to harmful rays unless they are properly protected.

Lead sheathing should separate operator from rays. Testing rooms should be isolated from other operations and sheathed with materials opaque to radiations.

Luminous paints—Increased radium dial painting, such as airplane instrument facings, presents a poisoning hazard.

A handbook issued by the National Bureau of Standards lists precautions.

Welding—Presents possibilities of burning, fume fever and ultra-violet radiations.

Protections include masks, goggles, ventilation and instructions in proper methods of operation.

Explosives—Workers are subject to poisoning or infection from toxics used in powders, and to explosion caused by sparks.

Safety regulations and health precautions enforced by management and contracting agencies include prohibitions against wearing clothing or shoes containing metal, methods of operation and

procedure. All infections or poisoning cases are given medical attention.

Although many authorities list fatigue as an industrial health hazard, Dr. W. H. Forbes of the Harvard Fatigue Laboratory recently told the Industrial Hygiene Foundation that physical fatigue:

Is of great importance in troops and formerly was important in industry—probably still is in China and other heavily populated but non-industrialized areas. It is not important in the modern industries of this country where, for ten cents, enough electrical energy can be bought to do the foot pounds of work which a strong man can barely do in a week.

Nervous fatigue is the type which occurs whenever there is a great pressure on a person to get as much done as possible in a given time, or whenever much emotional strain accompanies the work.

It is of enormous importance in industry, in fact it is this kind of fatigue that almost everyone refers to when, at the end of a day, he says: I am tired.

It is hard to decide which of the three main causes of nervous fatigue—pressure to work at full capacity, emotional strain, or numerous imperative and distracting stimuli—is the most important.

Slight degrees of this condition are normal, harmless and unavoidable at the end of a day's work. Marked degrees, however, are undesirable, leading to discontent, accidents, illness and inefficiency.

The most important single step which can be taken to minimize this type of fatigue is the difficult one of developing and fostering a spirit of spontaneous co-operation and friendship within the group of workers and harmonious relationships with the foreman and management.

Next in importance and even more difficult is the provision of an emotionally satisfactory life outside the factory. Supervision can play no part in this—it will defeat the object.

Although women in war production are numbered in millions, the definite effect of work on their health has not yet been ascertained. It is found generally that toxics and other skin irritants affect them to greater degree. Women also require more frequent rest periods, although this may be caused by their recent introduction to factory work and the undeveloped state of their working muscles.

Women have patience

ON repetitive, monotonous operations and those requiring great dexterity, women have proved to possess greater patience, and greater production ability than men.

The Department of Labor made its first cross-section survey of the effect of various kinds of production work on women in New Jersey, where it was found that 18½ per cent of the women covered by a study of 586 work records had suffered some kind of injury on the job.

Most of the injuries were slight. Four involved eyes, and one caused the loss of an eye. Many of the approximately 25 per cent who had experienced illness blamed it on their work, although there

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per thousand readers)
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Look at the leading advertisers in this issue; they have used Nation's Business an average of 9 years!

A Case of **LESS SCRAP, MORE FIGHT**

THIS sleek and polished example of superfine machining is a propeller shaft for a Buick-built Pratt & Whitney aircraft engine.

It used to be cut by slow and painful whittling from a forging made from a 184-pound bar of steel.

By changing the forging method, Buick found a way to get the same results from a steel bar weighing only 165 pounds.

Nineteen pounds less material to be cut away, 19 pounds less scrap to be sent back for remelting, considerably less expenditure of precious


machine tools and—111 propeller shafts from the same material that used to deliver only 100—in less time per shaft!

The country needs scrap metal—all you can dig up.

It also needs to *avoid* waste of materials in the making of fighting tools.

So we'll strike a bargain with you.

Do your share in "getting in the scrap"—and we'll do ours, in this and other instances like it, to get the utmost "fight" out of the materials we work with.



war goods
**WHEN BETTER AUTOMOBILES ARE BUILT
BUICK WILL BUILD THEM**

BUICK DIVISION OF **GENERAL MOTORS**



SERVING AMERICAN HOME OWNERS

IN THIS period of war emergency, when American families must carefully guard the value of their homes and keep them from "running down," Celotex is performing an outstanding service.

Celotex Triple Seal Roofing Products are available for roof repairs and roof replacements.

Celotex Insulation Materials can save precious fuel—cut fuel costs as much as 40%.

Celotex Gypsum Products—Wallboard and Plaster—are available for repair and remodeling work.

Your Celotex Dealer is a good man to know.

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ROCK WOOL—GYPSUM WALLBOARD
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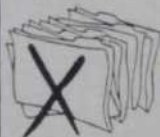
NO NEW CABINETS

a simple frame fits
in file drawer and
folders hang in file!

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Send me FREE sample of your Oxford Pendaflex folder and new, illustrated, fact-full booklet: "How to Cut Filing Costs 20 per cent". No obligation, of course.

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was no medical study to confirm or deny their assertions.

Nearly any list of general rules for employees to help them guard against industrial health or accident hazards would have at its top:

Keep clean.

Wear clean work clothing—soiled clothing may contain irritants.

Check up on your health—through the plant doctor if there is one, through your own if there isn't.

Never disregard what appear to be minor cuts or other injuries. Have them treated by a qualified person.

Use all protective devices provided.

Follow the safety rules.

Plant managers without professional health or safety personnel should follow general rules of good housekeeping by eliminating such obvious hazards as grease-stained floors, poor ventilation, obstructed aisles, insufficient light.

They should provide ample facilities to enable workers to keep clean and urge them to do it.

They should check into smells, tastes, fumes, or vapors, and seek expert advice on new materials that might bring along hazards that are stealthy because they are not obvious.

In general, there is a hazard if you can:

See it, step on it, or smell it.

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When You Work For AMERICAN You're Working For America

★ ★ ★

Each Employee of this Company makes an average of 9720 screws per day—which are used to assemble Airplanes, Guns, Tanks and Ships. Our Army and Navy are ON THE JOB EVERY DAY and they need these Planes and Guns and Tanks and Ships to WIN THE WAR.

Today There Are **98** Employees Absent

From the American Screw Company

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America Loses **952,560** Screws Today

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12 of these ABSENT EMPLOYEES
are from This Department

Work for America—Don't Loaf for the Axis

Curbing "Hookey" by War-Workers

The American Screw Company of Providence found that an average of almost ten per cent of its workers were absent each day—for no more serious reason, usually, than a desire to "take a day off." The company looked upon the problem as serious.

Harry Mayoh, sales promotion manager, and other executives devised a chart to make plain the amount of production lost by absences. It's printed in red, white and blue.

The effect was immediate. First week the posters were used, "absenteeism" dropped to less than half the previous week. Four departments reported no men out.

★ ★ ★

That Extra Something!

*...You can
spot it every time*

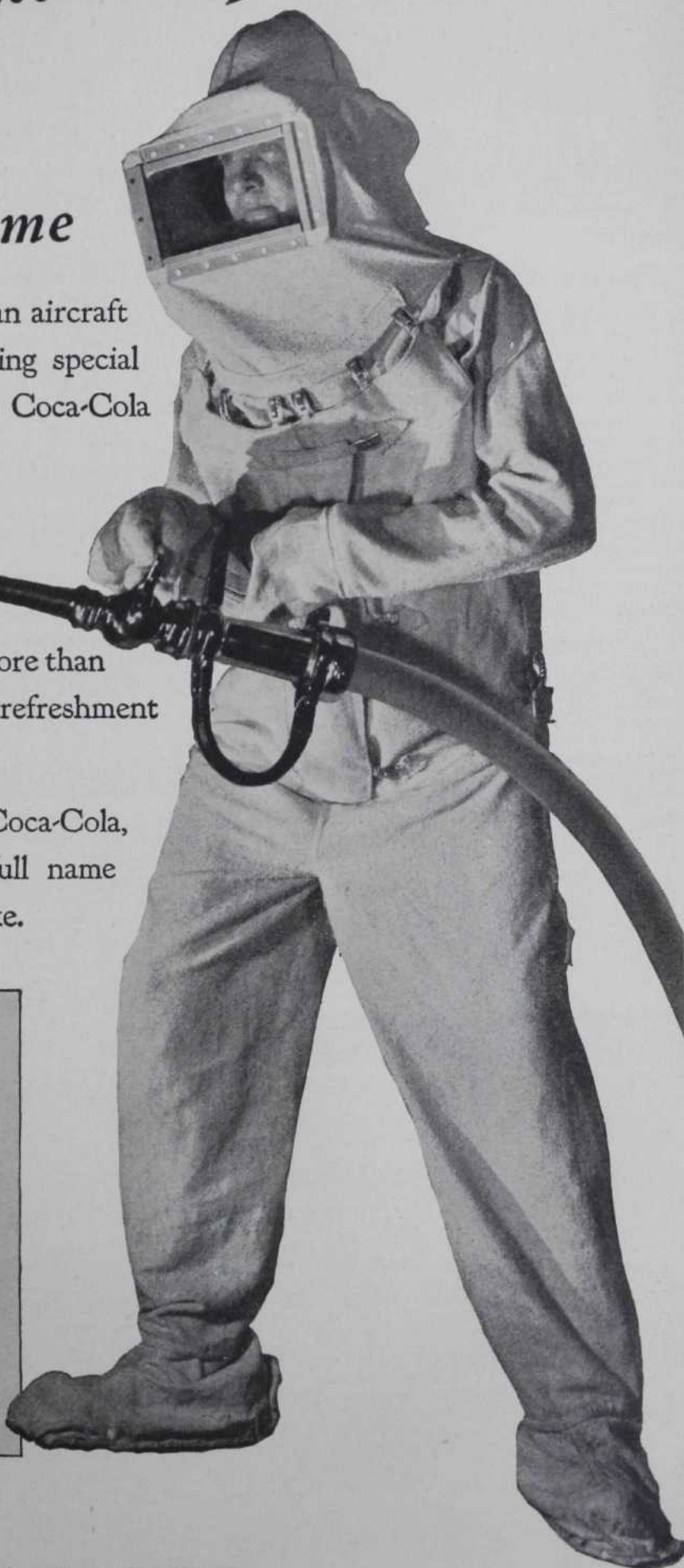
SOME jobs, such as fire-fighter on an aircraft carrier, just naturally take something special and out-of-the-ordinary. Producing Coca-Cola is a specialized job, too.

Coca-Cola represents the experience of 57 years in blending Nature's choicest ingredients. It ends thirst quickly. More than that, it brings you an after-sense of refreshment that is mighty satisfying.

The only thing like Coca-Cola is Coca-Cola, itself. Ask for Coca-Cola by its full name or by its friendly abbreviation. Coke.



*The best
is always the better buy!*





Insurance Checks Build No Bombers

Plants destroyed by fire today are not likely soon to rise again. Insurance checks cannot now buy new tools, equipment and buildings. Loss of production for a long time to come is invited by weak fire defenses.

Private Fire Protection

All plants, especially those located far from adequate municipal fire fighting facilities, can protect themselves with LaBour portable fire pumps for quick attack when fires start.

Simple to Operate

One workman can, if need be, fight fire alone with a LaBour unit— independent of power lines or water mains. Here's real protection you can afford. Write today for full information.

THE LABOUR COMPANY, Inc.
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PACIFIC GAS AND ELECTRIC CO.

DIVIDEND NOTICE

Common Stock Dividend No. 108

A cash dividend declared by the Board of Directors on December 16, 1942, for the quarter ending December 31, 1942, equal to 2% of its par value, will be paid upon the Common Capital Stock of this Company by check on January 15, 1943, to shareholders of record at the close of business on December 31, 1942. The Transfer Books will not be closed.

D. H. FOOTE, Secretary-Treasurer
San Francisco, California.

Beauty Kits for Bonuses

(Continued from page 36)

At Republic is one young woman with two children and a sick husband. She must make a living for all of them. Her mother has gladly come to her home to care for the children, but one of them is a nine months old baby who is too heavy for her to lift. The counselors take over the task of finding someone in the neighborhood to come in and help out. The mother can go to her machine each day free of home worries.

Methods must be found, too, to combat woman's tendency to take time out.

"When we go through the absence records," says Miss Koehler, "and find such reports as 'feet hurt,' 'backache,' 'sore throat' we know that our medical help must be extended beyond first aid. We have a competent doctor and nurse on duty 24 hours a day to give aid for any ailment a woman may have. We give actual treatment and advice on home treatment."

Results of these policies were obvious as I took a trip through the plant. Every face was alert, interested. Each operator seemed sure of herself and her ability to operate her machine—and assurance partly due, according to General Manager Otto Winter, to the plan of bringing in expert foremen to train new employees and supervise the work, partly to machines which are frequently specially designed for women operators.

"We will scrap any machinery we have," Mr. Winter said, "if we can find better."

Machines to women's measure

"BETTER" frequently means "easier to operate." On the third floor, for instance, I watched a very blonde young woman moving a load of drills on a "tote" cart. The cart had been especially designed so that it wouldn't tax her strength.

Further along an attractive girl who might have been an office receptionist was operating a big machine with scarcely a touch of her fingers.

"When a man ran that machine," Mr. Winters said, "it didn't have finger tip control. When he wanted to move the table he cranked it into position with about the same effort he'd have used to start an old car on a frosty morning."

All concessions aren't made to strength. I watched one girl cutting blanks on a milling machine with a constant flow of oil pouring over her hands.

"Doesn't that stain, or hurt?"

It seems that Republic asked this question first and that "Wherever oil is used for cutting and grinding operations, it is changed frequently to keep it clean and non-irritating."

At another place, I watched a girl straighten drills distorted in earlier operations. The drill is heated under a flame and straightened in the drill press. Sometimes one snaps in protest, and it is well known in the industry that drill press operators frequently bear the scars of their work on their faces. Women

usually will not work on such operations but Mr. Winter explained:

"We put a sheet of safety glass between the operator and her work. The operator can see what she is doing, and has no fear of being hit by a broken drill."

Work here is not performed on a "you do the work and we pay you" basis entirely. Women, unlike men, apparently put great emphasis on "pleasant surroundings" and appreciation of their work. They are given good bonuses for fine departmental work. The plant is set up into two major divisions—the roughing division and the finishing division. These are divided into departments. Each month the girls in each division are rated as to best all around performance—for production, attendance, and any other qualities which might have a bearing on efficiency in the department. Each girl in the two departments in each division which rates highest gets a bonus. That's where the beauty kits come in.

Red is a warning

MR. WINTER assured us that the firm provides all goggles, masks, hair nets—safety devices necessary to eliminate flying sparks, danger of catching in machinery. Well tailored smocks are also provided, "red" for the trainee, "blue" for the experienced worker. This enables a foreman or supervisor to spot a new girl instantly in case of trouble. New girls work only six hours and 40 minutes a day instead of eight. There is a breaking in period of a month so that a girl can become accustomed to the factory and to her machine. Experienced operators work seven hours and ten minutes a day, but they get paid for eight hours. Women cannot work at their best without sufficient rest, the management has found, so there are 15-minute rest periods, one at the beginning and end of each shift, also frequent ten-minute rest periods during each shift.

The most spectacular job in the whole plant is flash welding. This would never be considered nice work for a woman. But the flash welding operations at Republic are completely automatic.

In describing the process Mr. Winter said, "All the girl actually does is lay two pieces of drill between the dies, throw the two levers, press a button—and the job is done." When the two levers are pushed a magnificent cascade of stars springs from the machine. The young woman operator wore a mask which covered her entire face and neck. Although the sparks don't disfigure, they sting. Men don't mind this—women like the new mask which doesn't interfere with an attractive hairdo.

With the army's civilian personnel division asking that industrial employers plan immediately to employ women in their organizations to replace men called into the service, Republic Drill is "typical" of what can be done to adapt women to jobs formerly held by men.

"We're Going to be Closed Anyhow"

(Continued from page 26)

way. A man can't run a retail store under the price ceilings as they are.

There is a 90-day lag on a rising market between the increase in wholesale prices and the increase in retail prices. The result is our retail prices on the March 15 freeze date were lower, in many instances, than the March 15 wholesale levels. Retailers hadn't caught up with the rise yet.

Oranges are \$2.35 a crate on the wholesale ceiling and we are ordered to sell them at \$1.90 a box on the retail ceiling. The result is—no oranges, no corn, no tomatoes, no nothing in the grocery stores. Our stocks are being depleted and we can't replace them and handle them without a loss.

Building rat harbors

WE filed these voluminous June reports with the thought that they might be useful to the Government. Those tons and tons and tons of price lists are still piled up in the garages of California. They are only a rat harbor and a fire hazard. You can't even identify one of them. You can go in and pick one up off the top and find out whose it is, but if you ask for Bill Jones' price list, no one can find it.

So far as I know, absolutely no use has ever been made of this material. So what good is it? Yet it cost every retailer about ten per cent of his inventory value to make them out.

With all the profit being squeezed out of private and corporate business, big and little; with taxes eating up private capital; with the Government financing homes and industry on a basis which cannot possibly be paid off, what can the result be but national socialism, technocracy or monarchy?



This will not come about, of course, because small business, when pressed hard enough, will rise up and demand that practical men take over.




My conclusions are that we are heading for a combination of technocracy and national socialism. Whether O.P.A. desires that result, that is certainly what will happen.

Today we are moving stocks from one store to another to keep a few stores open and try to feed the people. We won't be able to do that long, as we cannot replace these stocks and recover our operating costs.

How can the retail food dealer affect the cost of living? He is a distributor and nothing else. He does not process, manufacture or grow. He distributes prepared or processed commodities, and the only possible way he could affect the cost of living would be to increase his percentage of profit.


All that is necessary to prevent retailers from increasing the cost of living and profiteering is to freeze the margin of gross profit on the 1941 level, plus whatever tolerance is necessary to cover the increased cost of doing business.

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Where Do We Go From There?

(Continued from page 28)

when peace arrives. Another large group will be employed in shipyards. These workers have been recruited from all parts of the United States. Unquestionably many of them will be loath to return home when peace comes.

The Los Angeles Chamber of Commerce is already considering the problem to be faced when several hundred thousands of these newcomers are turned loose after "P Day." How many can be absorbed into civilian occupations and how many must be urged to go back whence they came is a question not easily answered, yet every industrial center will face it. By building a national policy upon the composite of ideas developed by widely separated communities, we may meet it successfully.

What part, then, does the average business man propose to play in this organizing for peace?

Will he, through his local chamber of commerce or trade association, start the ball rolling in a way which must eventually command the utmost respect and consideration from every vote-minded government official?

Will he insist that the government agencies now flooding the country with war orders state definitely which orders are to be considered as terminated on the day peace is declared and which are to be completed regardless of lack of peace-time demand? Will he insist that this information be sifted down through the prime to the subcontractors, so there may be less guess work and more intelligence in making factory decisions on the morning peace is announced?

Will the business man insist that new emphasis be placed on vocational guid-

ance for peace-time activities, particularly among children now in junior high schools? Will he do his part in cooperating with the schools, so that we may not awake on the morning of "P Day" to the startling fact that we have many times more embryo mechanics of highly specialized skill than civilian industry possibly can absorb—that many of our boys and girls are still in training for occupations no longer in demand?

Will he know whom, among his own employees, he will try to mould into his peace-time organization and whom he must dismiss? Will he and his fellow employers have any kind of a central clearing house through which desirable men can be guided quickly into peace-time channels?

What help will one business man be able to render to another in solving the problems of a sudden transition back to civilian activity—a transition that is bound to be much more drastic and upsetting than our relatively slow transition from peace to war economy? What will the community as a unit know about men and material needed for its own commercial existence?

It is a tremendous job, calling for the same type of acumen which has put Business far ahead of Government in executing the war effort. Government has not covered itself with glory in organizing for war. There is no reason to expect it to do so in organizing for peace. Business has shown it can do the war job. If it demonstrates that it is preparing to do a peace-time job equally well, probably the public will have regained some much-needed confidence in it and will insist that Government listen to Business.



Too many men are assured that we will go back to normalcy after the war



FOR VICTORY TODAY AND SOUND BUSINESS TOMORROW



Get This Flag Flying Now!

This War Savings Flag which flies today over companies, large and small, all across the land means *business*. It means, first, that 10% of the company's gross pay roll is being invested in War Bonds by the workers voluntarily.

It also means that the employees of all these companies are doing their part for Victory . . . by helping to buy the guns, tanks, and planes that America and her allies *must* have to win.

It means that billions of dollars are being diverted from "bidding" for the constantly shrinking stock of goods available, thus putting a brake on inflation. And it means that billions of dollars will be held in readiness for post-war readjustment.

Think what 10% of the national income, saved in War Bonds now, month after month, can buy when the war ends!

For Victory today . . . and prosperity *tomorrow*, keep the War Bond Pay-roll Savings Plan rolling in *your* firm. Get that flag flying now! Your State War Savings Staff Administrator will gladly explain how you may do so.

If your firm has not already installed the Pay-roll Savings Plan, *now is the time to do so*. For full details, plus samples of result-getting literature and promotional helps, write or wire: War Savings Staff, Section F, Treasury Department, 709 Twelfth Street NW., Washington, D. C.



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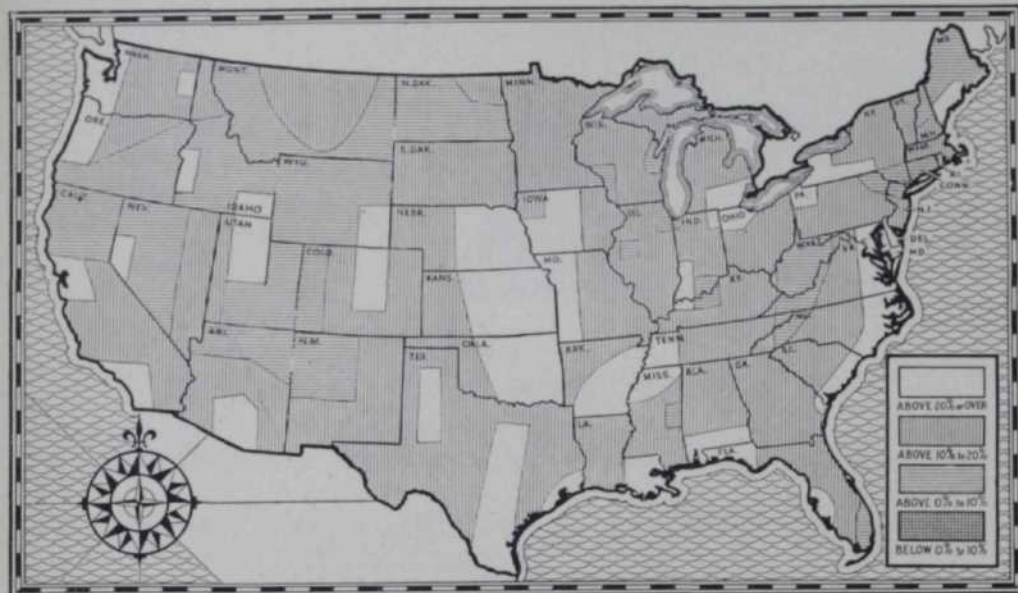
War Savings Bonds

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NATION'S BUSINESS

The Map of the Nation's Business

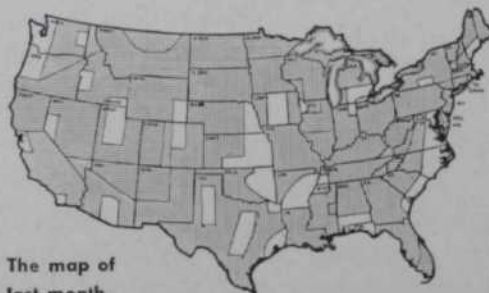
By FRANK GREENE



INDUSTRIAL PRODUCTION expanded further from the high level of October with more than 50 per cent of the nation's capacity devoted to war needs. Necessary repairs reduced steel ingot output two per cent and railroad freight traffic declined seasonally from the autumn peak. Shipyards in November launched a record 84 ships while automobile manufacturers were already producing armament at a rate far exceeding their peace-time production. Textile plants continued busy at previous capacity operation and electricity output again broke all records.

Engineering contract awards were ten per cent higher than the previous month. Stock market trading matched October's volume as prices declined. Government regulation held commodity prices unchanged except for a further rise in farm products, notwithstanding record harvests. Labor shortages plagued both farm and industrial

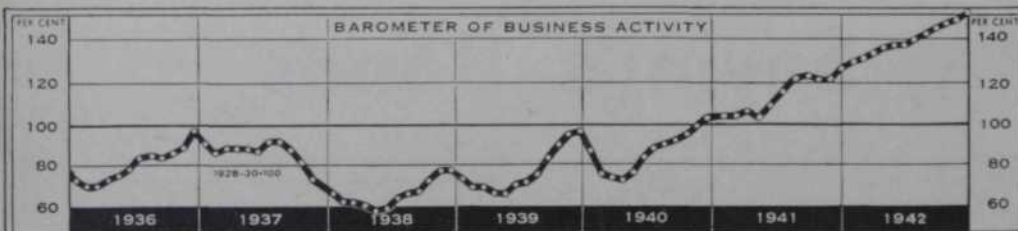
Further improvement in the Map results from continued rising prosperity in agricultural and industrial regions



The map of last month

employers but higher incomes and early holiday buying caused an upsurge in retail sales.

Business failures continued far below a year ago.



With steel output still holding at a close to record rate and war production continuing to expand, the Barometer chart line for November again moved upward to stand at a new peak level.

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HE'S GOT THE "DROP"

ON EVERYTHING UNDER THE AXIS SUN!

OUT OF THE BLUE of the stratosphere he comes—a lad from the U. S. A. in a sleek silver bullet.

Woe to any Jap or Nazi that tries to slip away! This new Navy fighter has "got the drop" on everything under the Axis sun—

The blazing, blasting sock of a mighty tank—on wings that fly it higher, faster than any Navy fighter now known!

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Kelvinator can take particular pride.

For their colors have long been flying there. Swarms of British and American bombers that have been blasting the Axis are equipped with Nash-Kelvinator propellers. Yes, made by the men who yesterday built the refrigerators and automobiles for America at peace.

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They shall not fail, any more than our gallant flyers shall falter, until the last shot is fired—the last bomb finds its target in blazing Tokio.

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